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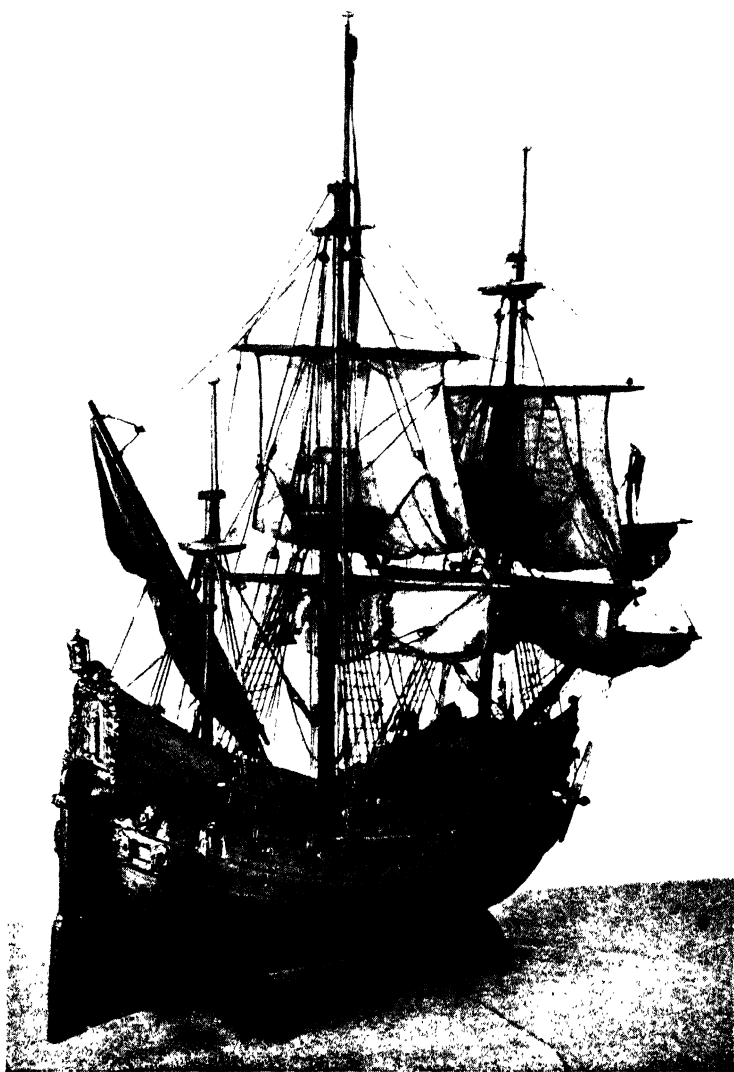
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THE BACKGROUND OF GEOGRAPHY



A DUTCH MERCHANTMAN (MID-SEVENTEENTH CENTURY)

Fr. From a model in the Nederlandsch Historisch Scheepvaart Museum, Amsterdam

THE BACKGROUND OF GEOGRAPHY

BY

M. WHITING SPILHAUS
F.R.G.S.

WITH MANY ILLUSTRATIONS AND MAPS

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TO
MARIAN JOY SEDGWICK SPILHAUS

PREFACE

IN this book I propose to explain how and why man's geographical knowledge grew: how little by little he widened the circle in which he lived, until he knew the world as we know it to-day.

We have all heard something about the cave-men, and even about this planet before human life appeared upon it. We remember that our earliest glimpse of mankind revealed small groups of men who lived together very like animals, and then who gradually learned to make tools of stone, of bronze, and of iron, and to improve their manner of life. Presently we find them living in communities governed by simple laws, and inspired by a simple form of religion. We remember, too, that it was a very long time before they built and launched ships, and thus increased their opportunities of intercourse with one another. The Roman poet Horace declared that the first seafarer must have had a heart of tough oak and triple brass.

We are taught something about discovery too, but generally we hear only about isolated voyages, as if certain heroic adventurers had shot like meteors from the historical sky, leaving a trail of glory. We are not, as a rule, made to understand how forces were at work all through history which have impelled mankind.

We cannot properly appreciate the outline of geographical discovery unless we set it against a background of general history, and this is what, on broad lines, I shall endeavour to do in this book.

For the sake of continuity I am going to start from the earliest form of civilization of which history tells us. Such a plan may necessitate the repetition of certain matter which is already familiar. The reader must have patience with it, because of its new significance, for, like the pieces of a jigsaw puzzle, it cannot be left out of the pattern if the finished picture is to be complete.

M. W. S.

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Wisdom has depended upon three things—
the tongue of the Arab, the brain of the Frank
[Western Europeans in general], and the hand
of the Chinese.

Moorish Proverb

THE BACKGROUND OF GEOGRAPHY

CHAPTER I

THE DAWN OF HUMAN KNOWLEDGE

THE earliest clever people with whom we have to deal here were called Sumerians. They were a part of a widespread Bronze Age culture. Their capital city, Eridu, was on the river Euphrates, at the head of the Persian Gulf. The sea has receded since then, and if an ancient Sumerian came back to look for the site of his old city he would be considerably astonished to find it a hundred miles or so inland. They built with sun-burned clay bricks, and they were given credit for the Tower of Babel. They understood irrigation, they made clay images, and they wrote upon clay tablets; they traded up and down the Persian Gulf, and, having no one else to fight, they thrust their long spears into one another. This went on for a very long while, and by the time (about 2800 B.C.) when the conquerors of the Sumerians approached Egypt had a parallel civilization and the Cretans were familiar with the sea.

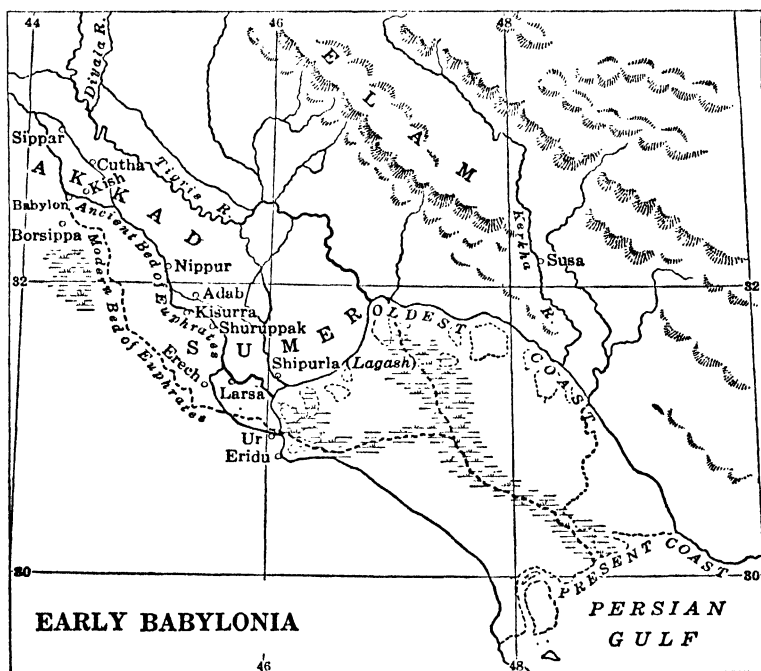
The conquerors called themselves Akkadians, and came from the western borders of the Sumerian kingdom, where they had been harrying and skirmishing among the Sumerians from father to son for several generations. They had reached the stage when they could appreciate the good things in life, and the tribes, united under their first great leader, found themselves strong enough to seize them. Their leader, Sargon, is the original of the story of the babe in the bulrushes, afterwards translated into Moses' biography. He widened his dominions till they reached the Mediterranean Sea. But something happened here which you will find often does happen in the course of history. The conquerors were principally a fighting race; they had still to make their way. They were strong in arms, but they had not had time to develop culture. So they adopted what culture they found among the Sumerians. They learned the Sumerian writing, and adopted Sumerian as the language

of the educated and official people. As Greek was widely used long after the fall of Greece and Latin became the medium in which scholars expressed their ideas long after the fall of Rome, so it was in the early history of civilization.

This Sumerian kingdom lasted some hundreds of years, but disturbances had not ceased from Sargon's time onward, for other Semitic tribes had settled in the north, and had continually to be suppressed. They called themselves Assyrians, and Assur was their capital city. Also from the east of the Tigris came fresh tribes of unknown origin, but whom we recognize as the Elamites of the Bible; and from Canaan, in the west, came a Semite race, familiar to us as Amorites, of whom there were already traders settled in the Sumerian-Semitic kingdom. The old story is to be repeated. Among all these warring folk the Amorites attacked Sumeria and conquered. They chose Babylon, then a town of secondary importance, as their capital city, and by the time another century had passed they had possessed themselves of the whole country. Under their great king Hammurabi the first empire of Babylon had come into being. That was in 2100 B.C., about a hundred years before Abraham was born. The Babylonian trading-ships plied down their great rivers and out into the sea, and round the coasts of Arabia. The people believed that God had drained the earth out of a confusion of waters, after the fashion in which the earlier inhabitants of their own land had drained the marshes between the rivers. There were geography books and books on the stars in their libraries. These libraries were stocked with cylinders and tablets of clay, inscribed with wedge-shaped characters.

In Hammurabi's time Egypt suffered an invasion, and the invaders, known as the Shepherd Kings, established a dynasty there. Joseph served Egypt under the Shepherd Kings, and it was when another dynasty succeeded to the throne, kings "which knew not Joseph," that the children of Israel came to such a sad pass. Their new masters felt nothing of the obligation Egypt had been under to the wisdom of Joseph, and they treated these alien people among them in the usual way that captive people were treated in olden times—as slaves. Joseph's great-grandfather, Abraham, was born about 2000 B.C. (the authorities are not agreed upon the exact dates of these ancient folk), and he was an old man of over seventy when he led his tribes from the borders of the Arabian desert towards the Land

of Canaan (Palestine). If you remember fully the story of Jacob and his sons, and how Joseph's elder brothers sold him to the trading caravans that were passing by, you will have a very vivid picture of the life of a pastoral people in those days. Joseph stood before Pharaoh about 1715 B.C. About a hundred

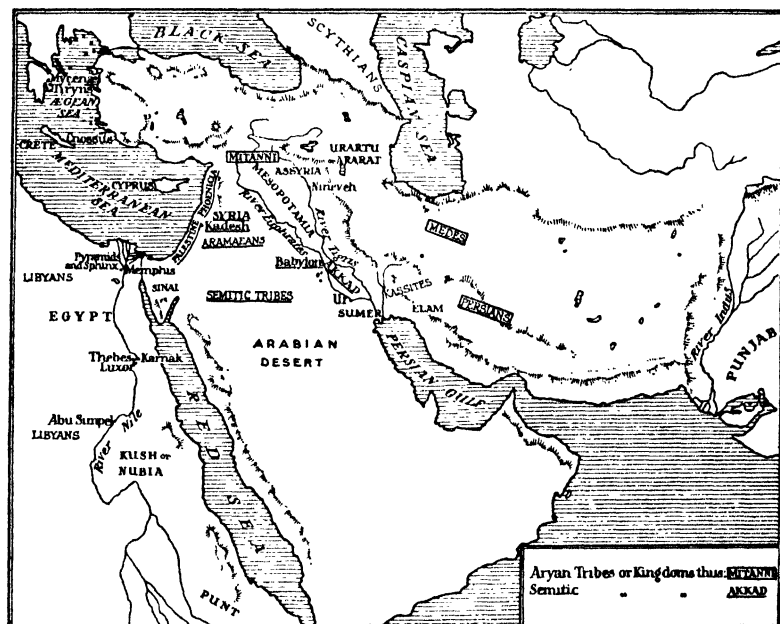


From "Ancient Civilization," by Hutton Webster (D. C. Heath and Co.)

and fifty years later, as the story goes, the Princess of Egypt found Moses in the bulrushes—the Hebrew baby who was destined to lead his people out of bondage. There was some big naval raid in the Mediterranean about this time, for the wonderful town of Knossos, in Crete, was sacked. Refugees made for Asia Minor, and we think that the Philistines, who subsequently became such a thorn in the flesh of the Israelites, were an active element among these refugees.

When the Israelites returned over the Red Sea they found the Hittites and the Assyrians fighting out their differences. You hear a great deal about the Hittites when you read of

the children of Israel. They had come from the northern fastnesses of Asia Minor, where they had founded a kingdom for themselves. The King of Egypt also came raiding into Asia now. Egypt had been trading on the other side of the Red Sea for some time, as the story of Joseph and his brother indicates. About 1491 B.C. a great Egyptian queen called Hatshepsu sent



EGYPT AND WESTERN ASIA, 2000-1000 B.C.

an expedition to "the land of Punt"—probably Somaliland—in quest of fragrant gum-trees from which to make incense for the gods of Egypt. This expedition brought back many of these trees—also peacocks, monkeys, and greyhounds as pets for the Queen. For some time Egypt was a power in Asia. She was not destined to retain this power. She grew luxurious and unwarlike. The Assyrians emancipated themselves, and it was they who, under the king Tiglath Pileser I, asserted supremacy and, in 1100 B.C., conquered Babylon. Their own capital city was now Nineveh, and for many hundreds of years the possession of Babylon swayed to and fro as Nineveh and Babylon disputed the right to supreme power. More Semites came and

settled in a district which later was known as Syria, with Damascus as their capital, and they presented a fresh problem for the reigning powers to tackle.

It was in these days, too, that the children of Israel clamoured for a king. They saw the people round them doing doughty deeds under their kings, and saw every reason why they should have a king to lead them into battle and give them the dignity and grandeur that royalty brings. Some while before this a woman called Hannah had brought her boy to the Temple to lend him to God. And the boy, as you know, grew up and became a great prophet. It was Samuel who, in his old age, now warned the children of Israel that kings were an over-rated luxury. He wished to persuade them to alter their minds, because to found a monarchy would be to change their form of government. He had ruled Israel all his active life, and his sons had succeeded him. They were not behaving well, which was partly the source of Israel's dissatisfaction. Samuel warned the people in the manner of Æsop:

The Frogs prayed to Jove for a king:
"Not a log, but a livelier thing."
Jove sent them a stork,
Who did royal work,
For he gobbled them up, did their king.

But the people had their way, and Samuel anointed Saul (about 1095 B.C.). You remember how he chose Saul because he was a tall, imposing-looking man—some one who would look every inch a king. Looks counted so much in kings.

Saul reigned and David reigned, but I have no doubt that the Hebrew king you remember most about is Solomon. Solomon came to the throne in 1015 B.C. (as far as such old dates can be exact). The Hebrews never rose to be a great political power. Even King Solomon was not as important as he sounds in the Bible. The stories about him are so picturesque and stick so in our minds that we are apt to imagine him more powerful than he really was and his kingdom much larger than it ever became. But Solomon has a special interest for us in this book, because he brings us into touch with the first really great maritime nation of the world. These people were the Phœnicians. They were not the first mariners of enterprise, for the Ægeans, or Minoans, were familiar with the sea. They had ranged as far as the Balearic Isles, possibly had reached Spain, and undoubtedly gave the Phœnicians the lead.

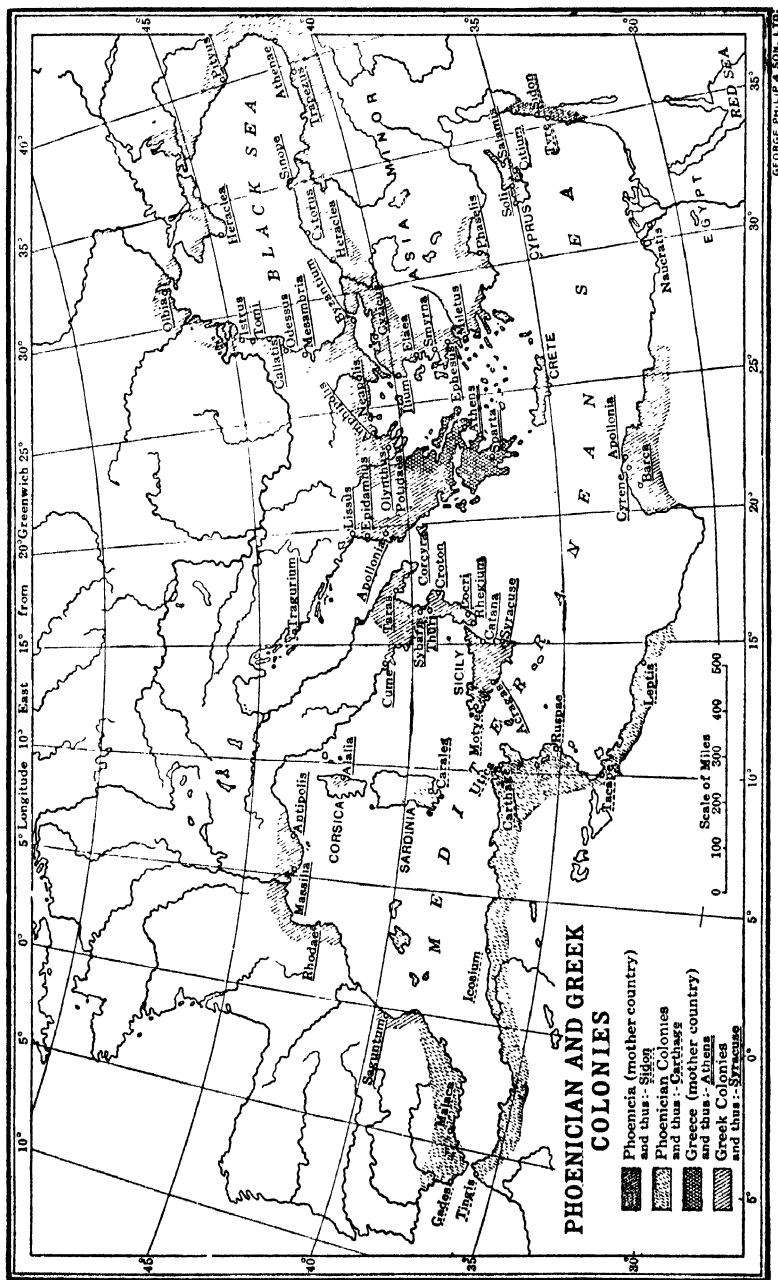
But the fall of Knossos curtailed Ægean enterprise, and the Phœnicians seized the opportunity to carry their own development through.

These people occupied a narrow strip of Mediterranean coast-line, hemmed in by the mountains of Lebanon, which almost pushed them into the sea. They had plenty of timber—"the cedars of Lebanon," "the firs of Senir," and "the oaks of Bashan"—with which to build ships. Possibly there grew up among them some of the earlier refugee Cretans, who would bring sea knowledge with them too. They founded the cities of Tyre and Sidon (where Sur and Saida stand to-day), and as time went on they travelled farther afield, founding trading colonies along the north coast of Africa and in Spain—"the land of Tarshish"—and, as you will remember, even reaching England. One of their towns on the north coast of Africa was destined for great things. It was Carthage, founded about 800 B.C. near the modern site of Tunis. Another, Gades, on the south point of Spain—Cadiz to-day—never lost its importance in history. The Phœnicians were pioneers in the art of glass-working—the sand of their seashore was especially suited to this—and next to cedar-wood one of their most important products was a sort of dye made from a crushed shell-fish and known as 'Tyrian purple.'

Trade has always been a great source of travel and exploration. In our own time men are willing to risk much and to endure much in the cause of science and of scientific discovery; but in the olden days it was usually a more worldly motive which spurred them onward. But for this instinctive desire to win new markets and acquire new merchandise the opening up of the distant places of the globe would have been a much slower process than it was.

By the time King Solomon was dealing with King Hiram of Tyre during the early part of the tenth century B.C. the Phœnicians had already attained a position of first commercial importance. Their artificers were the finest in the known world. Their masons fashioned the stones of Solomon's temple, and their goldsmiths made the delicate vessels for use there. These master-craftsmen were lent to Solomon, and among them was another Hiram, a cunning worker in bronze, who designed all the bronze-work for the building.

Solomon made a trading alliance with King Hiram, and Hiram built a navy for Solomon in the Red Sea. It sailed every



From "Early European History," by Hutton Webster (D. C. Heath and Co.)

three years, trading with Hiram's fleet. If you read the twenty-seventh chapter of Ezekiel you get some idea of the merchandise they traded in. They went to Arabia for spices, to Ophir (possibly on the African coast) for gold, and to Tarshish for gold and silver. The tenth chapter of the first book of Kings tells you the story of another of Solomon's trading alliances. The Queen of Sheba heard of Solomon's enterprise. Hiram's sailors must have told her people all about it when they went down the Red Sea to Sabæa, or Sheba, an Arab kingdom on the south coast of Arabia. The Sabæans were a trading people themselves. Their caravans travelled northward with spices and perfumes and precious stones, and probably with Indian merchandise which their coasting-vessels had picked up from Indian coasting traders. They, too, must have brought home the news of the ruler in the north so anxious to trade. The Queen of Sheba thought that Solomon seemed a man of her own mettle, and she came personally to see him, and very polite and pleased with each other they were.

One of Solomon's many wives was a daughter of the Pharaoh of Egypt, which hints at a further alliance. There was a great road in the north from Egypt into Asia. The Philistines grew rich through taking toll of the traders along this road.

Some two hundred years after Solomon's death Assyria was at the height of her power. Tiglath Pileser III, whom you meet in the second book of Kings, took Babylon and found a new and enlarged Babylonian empire. As time went on Assyria battled her way through the intervening peoples, crushing Israel in the process, and under Sennacherib threatened Egypt itself. As you will probably remember, Egypt was saved by an epidemic which devastated the Assyrian army. Sennacherib died in 681 B.C. Assyria's last famous king, Assurbanipal, Sennacherib's grandson, brought Assyria to her zenith. He even won a foothold in Egypt. But the time has come for a decline. Other peoples are waxing strong. More Semites, known as Chaldees, who had made themselves masters of the Euphrates valley trade-route, descended upon Assyria. They were aided by an entirely alien people, who had found their way from much farther north to the near districts of the Caspian Sea, and had Ecbatana as their capital. The Chaldean leader was Nebuchadnezzar, who founded the second Babylonian Empire. Among other exploits that we read of in the Bible we find him smiting the Pharaoh Necho, who is especially

interesting to us because it is told of him that he employed the Phœnicians to trade for him, and that he sent an expedition of Phœnician sailors down from the Red Sea trading ports right round Africa—pausing for a season at a time to grow corn and other fruits of the earth to keep the ships in provisions—and on through the Strait of Gibraltar, and into the Mediterranean home again. It is possible that this expedition took place. We can understand that it is easier for a sailing-vessel to travel round Africa from east to west than from west to east, because wind and current are more favourable. Yet there is a strong current off Cape Corrientes—so named because of this current by Portuguese navigators in later days—which was supposed to have checked the enterprise of Arabian sailors when they came to sail south down the coast of Africa.

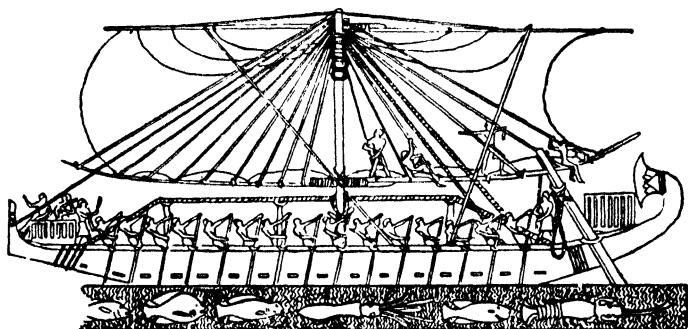
The Chaldee-Babylonian Empire lasted a comparatively short time. The Medes and Persians, two branches of the same original stock, and allies of Nebuchadnezzar, were a superior people. They believed in a pure and inspiring religion bequeathed to them by their prophet Zoroaster, who taught them that Goodness and Light were one. They worshipped Light on a hill-top, unhampered by stone walls or man-made images. They were destined for great things. The Persians subdued their brothers the Medes, and then inevitably strove for empire. In 538 B.C. Cyrus conquered Babylonia, and it became a Persian province.

What were the ships like in which these early seafarers so stoutly put to sea? The most primitive form seems to have been a hollowed-out tree-trunk. Then came—especially in north-western Europe—the coracle, made of animals' hides stretched tightly over a framework of wood or wicker. The Egyptians at a very remote period had ships built of planks, propelled by oars and borne forward by sails. About 3000 B.C. we know that in Egypt there was a ship with thirteen oars on either side and one rather high, narrow sail. Instead of having a rudder, she was steered by three large oars wielded by three men standing in the stern.

There is no doubt that Egyptian ships as far back as 3000 B.C. were well-built vessels of considerable size. This was the beginning of the Pyramid Age, when stone was brought by water from a long way up the Nile. . . . Egypt is a land badly off for large timber, and the method of building by means of keel, ribs, and planks which developed elsewhere from the great canoes scooped

out of a single tree was never possible, or at any rate never easy, in Egypt. That being so, the Egyptians built their boats of short, narrow pieces of wood, each pinned sideways to the next. They gave them no keel and depended for strength on thick sides and strong fastenings.¹

While these events had been taking place in Asia a people in Europe had been making vast strides. These people were the Greeks, the most remarkable race of the antique world. In many ways, it is true to say, the modern world has lagged behind them, and in few has it gone beyond. They were the

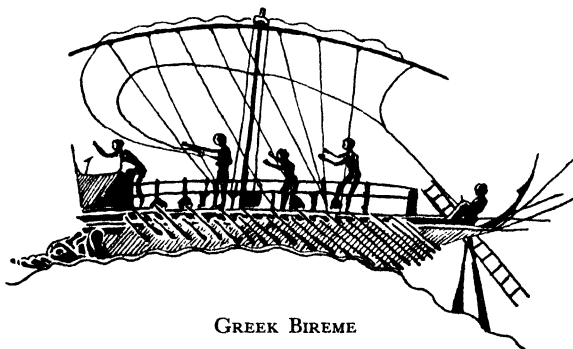


EGYPTIAN SHIP, ABOUT 1500 B.C.

first great poets, great thinkers, great sculptors. They were also a trading people, entering into competition with the Phœnicians, who in earlier days had brought them their merchandise, taught them the Phœnician alphabet, and shown them how to make bronze. Their earlier adventures are lost to history. Their own story of the Argonauts was probably founded upon an old tradition of some trading voyage, but its date is unknown. The Argonauts were supposed to have set out for Colchis, on the Black Sea, in search of the Golden Fleece. In later times we know that the Colchian traders strained the gold-bearing waters of Asiatic rivers through sheeps' skins, and that they put up their gold-dust in sewn-up skins. (Skins were often used as receptacles long ago, and are still so used in the East.) When we imagine how some of the dust would cling to the skin and gild it we recognize the origin of the story. The Greeks of Homer's time were seafarers, but they had not fared very far. They knew the Ægean, the

¹ *The Sailing-ship*, by R. and R. C. Anderson (Harrap).

Mediterranean, the Black Sea, but they knew little else until somewhere towards the eighth century B.C., when they founded Syracuse, in Sicily. In 720 B.C. they founded Sybaris, in Southern Italy—the precursor of wide expansion in this region. Sybaris was famous for its luxurious habits of life, and ‘sybarite’ came to mean ‘luxurious.’ In 600 B.C. they founded Massilia, where Marseilles stands to-day, near the mouth of the river Rhône, up which traders could carry their goods to the tribes in the interior. From there they extended trading settlements along the coast of France, and to the isles of Corsica and Sar-



GREEK BIREME

dinia. To the east they made even more important settlements. At the entrance of the Black Sea in the first half of the seventh century they founded the twin towns of Byzantium (to become Constantinople in far distant days) on one side of the Bosphorus, and Chalcedon on the other. From there they dotted settlements all round the Black Sea. Communities at the same time sprang up on the coast of Asia Minor. In 631 they founded Cyrene, on the north coast of Africa, and spread along the coast from there eastward towards Egypt and westward towards the Gulf of Sidra. In Egypt itself they were permitted, in return for services rendered as mercenaries to Pharaoh Psammetichus, to set up a Greek trading settlement—Naucratis.

At one time they bid fair to outdo the Phœnicians in the Western Mediterranean, but the Phœnicians made a stand and recaptured their supremacy, leaving the Greeks to retain possession of their Italian stations. The Phœnicians concentrated on the western side of the north coast of Africa, where they had founded Carthage, and on their stations in Spain, whence they sailed into the Atlantic, and, coasting up the west

of Europe, fetched tin from Cornwall, and doubtless other merchandise. They shared Sicily and Cyprus with the Greeks, and did not interfere with Massilia and its sister settlements.

The earliest known map of the world was drawn by Anaximander of Miletus in the sixth century B.C. To him the world was a section of a cylinder suspended in space. In the centre



SCYTHIAN ARCHER

of this round slice lay the Ægean Sea! Perhaps you may remember that in the Book of Job (chapter xxvi, verse 7) it is written that God "stretcheth out the north over the empty place, and hangeth the earth upon nothing." Another Greek, Hecataeus, who lived in the sixth and fifth centuries B.C., wrote the first work dealing with geography. It was entitled *Periodos*.

Yet another famous Greek was Herodotus of Halicarnassus, who lived in the fifth century B.C. He is usually called the Father of History, but he ought to be called the Father of Geography as well, because he travelled a great deal and wrote careful, conscientious accounts of his travels. He made some mistakes, of course—left many things out because he did not know of them, and put some things in that we should now think of as fables and fairy-tales; but we owe much to his eager brain, his faithful memory, and his active pen.

Herodotus had visited Egypt and Mesopotamia, but he did not go up the Nile higher than the First Cataract, and he imagined that in its upper course the river flowed from west to east.

Of the lands to the north of the Black Sea he had also much new knowledge to record, for Greeks had penetrated the Steppe land east of the Don, then considered to be the boundary of Asia, and had learnt something of that vast open country, which degenerates into desert on the east and stretches northward to the Ural Mountains. The details of the Caucasus Mountains and the Caspian Sea are also, on the whole, accurately known.¹

¹ *A History of Geographical Discovery and Exploration*, by J. N. L. Baker (Harrap).

Herodotus realized that the world was not a section of a cylinder floating in space. He was the first geographer to recognize and name the three continents—Europe, Asia, and Africa—enclosing the Mediterranean Sea. He took the trouble to record the manners and customs of various peoples, and though some of his statements are odd, much of the information he gives has been tested and found true. Some of the strangest pages in his history concern an Asiatic tribe called the Scythians. They were nomads. Their homes were not in tents, but in wicker huts mounted on wheels. They were skilful archers, and, like the Red Indians of America of later times, they scalped their defeated enemies. Another gruesome custom was that of making goblets from the skulls of the slain. The garments of the Scythians were spun from hemp instead of from flax, and among their favourite foods was a cheese made from mare's milk.

CHAPTER II

GEOGRAPHY IN EARLY DAYS

EARLY in the sixth century before Christ King Darius of Persia sent a Greek called Scylax of Caryanda to explore the river Indus—the river from which ‘India’ gets her European name. That very great King was campaigning in Sind and the Punjab, of which he annexed large slices to his dominions, and he thought the moment a favourable one for a little exploring. Scylax reached the Indian Ocean, and probably caught sight of the coast of Oman and the Persian Gulf. One of the most important things about this expedition is that Alexander the Great read the report written by its leader.

You must already know a good deal about this wonderful young man, who when only sixteen years of age acted as regent for his father, Philip of Macedon, and succeeded to the throne at the age of twenty. You will remember how he crossed the Hellespont and defeated the Persians on the shores of the river Granicus, making himself master of Asia Minor; how he overcame Darius III, occupied Damascus, and overwhelmed Tyre after a siege lasting seven months; how he then marched into Egypt and founded the city of Alexandria; and how in 331 B.C. he won the battle of Arbela, always counted as one of the decisive battles in world-history. Alexander’s old foe, Darius III, fled from the field, Babylon and Susa surrendered, and the young conqueror entered Persepolis, the capital of Persia, in triumph.

Sir Edward Creasy says in his interesting book *The Fifteen Decisive Battles of the World*, “Alexander’s victory at Arbela not only overthrew an Oriental dynasty but established European rulers in its stead. It broke the monotony of the Eastern world by the impression of Western energy and superior civilization.”

There is a French proverb which tells us that “appetite comes with eating.” This was certainly the case with Alexander when it came to devouring kingdoms. In the year 326 he decided to invade the then unpenetrated realm of India.

Now, Alexander had had as his tutor a great Greek philosopher called Aristotle, whom we must salute as the first scientific geographer. Aristotle proved that the earth was a globe. He

realized that it throws a circular shadow on the moon during an eclipse, and he noted that as one travels southward the horizon shifts, familiar stars vanish, and unknown stars appear in the sky. He had succeeded in communicating to his royal pupil something of his enthusiasm for exact knowledge. Much that Alexander had learned from Aristotle was of great practical use to the conqueror during his campaigns in the East.

Two years of fighting in Central Asia preceded the invasion of India. Darius had taken refuge with Bessus, Satrap of Bactria,¹



MACEDONIAN CAVALRYMAN

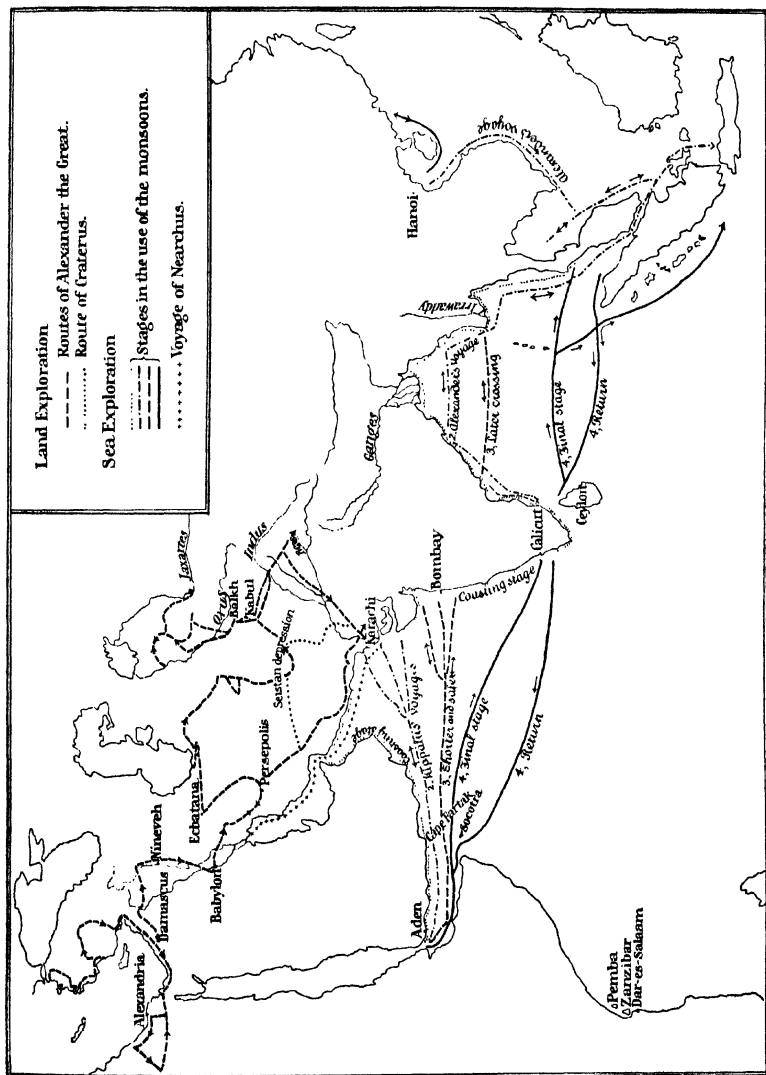
and Alexander followed him along the caravan route running eastward to Khorassan. The death of Darius at the hand of Bessus left the conqueror free to annex the provinces which lay athwart his line of march. He pushed eastward across Northern Afghanistan and thence up the Gurgan valley. It would take too long to tell you about all his deeds during these two years, but let us pause to remember

that he was the founder of the Afghan city of Kandahar. ('Iskander' is the Oriental form of his name.) Alexander and his men crossed the river Oxus on rafts, and after resting his army at Samarkand he advanced to the Jaxartes (now called the Syr Darya) and founded a city on the site of the place known to the map-makers as Khotand—a site about 3500 miles east of Macedon. "What that signified," writes Sir Percy Sykes,² "before the era of modern communications can hardly be grasped by a European of the twentieth century. Yet the Macedonians considered the Jaxartes to be the same river as the Don!"

And now the young conqueror entered the almost unknown land of India. Crossing the Indus, he reached the banks of the river Hydaspes, now called the Jhelum, and there defeated King Porus, who opposed his advance. After replacing this monarch on his throne Alexander pushed into the Punjab—the province of the Five Rivers—and proposed to invade the

¹ Now called Balkh.

² *A History of Exploration.*



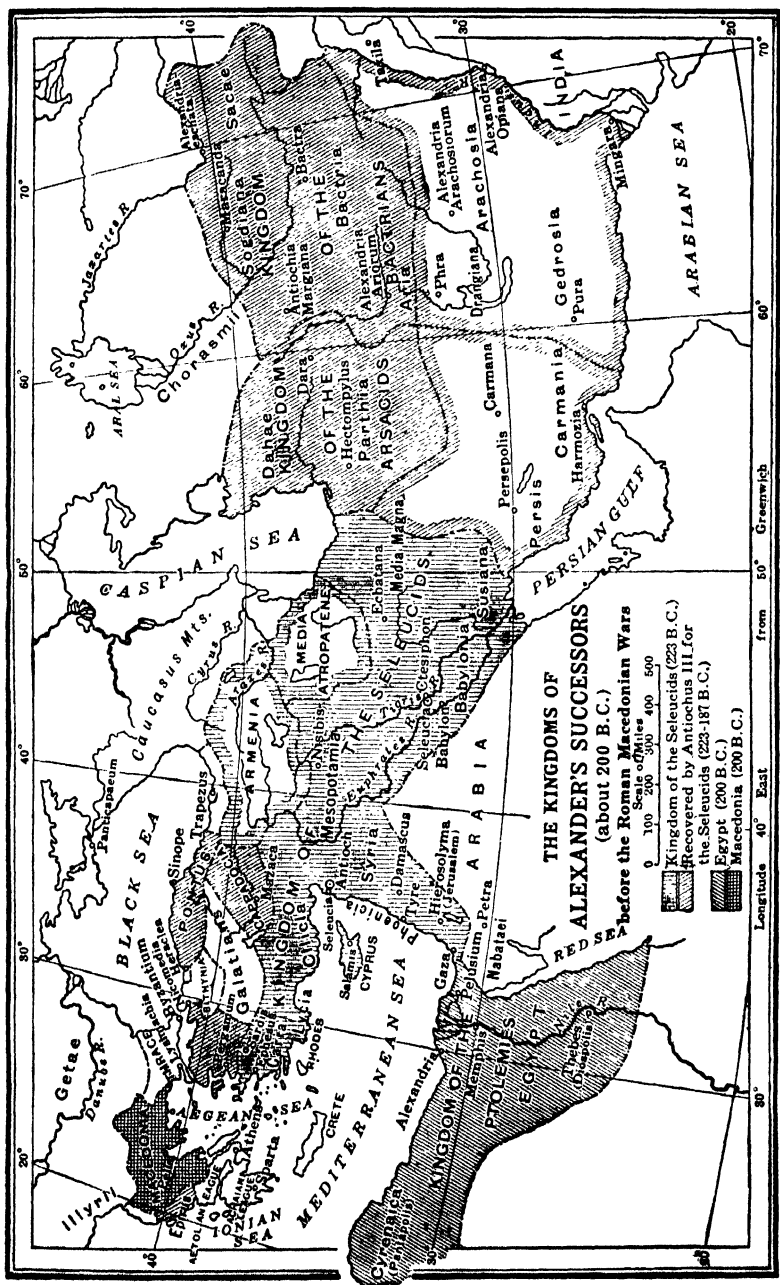
THE EXPLORATION OF ASIA IN GREEK AND ROMAN TIMES
 From "A History of Geographical Discovery and Exploration," by J. N. L. Baker (Harrop)

valley of the Ganges. This project was thwarted by his war-weary troops, who mutinied, and compelled him to swing round and return to Persia. This meant a march of nearly a thousand miles through hostile country. And it was not uneventful. When, after many skirmishes, Alexander reached the Indian Ocean he gave orders to an experienced officer called Nearchus that he should sail westward towards the Persian Gulf, while the army, keeping in touch with the fleet, moved in the same direction. For about a hundred miles this plan was successful, but when the army reached a promontory—the Ras Malan—it could not follow the line of the sea-coast any longer, and, driven inland, the soldiers suffered terribly from thirst. Alexander struggled back to the sea, but he gave up his original plan and turned inland again. He thrust through Beluchistan, where, in a fertile valley, he paused, and his hard-driven troops enjoyed some well-deserved repose. It must have been a painful shock to the commander when Nearchus suddenly reappeared on foot and in rags: but the officer was able to assure his master that the fleet was lying safely at anchor off Harmozia (Ormuz), in the river Anamis (Minab).

In spite of many hardships and perils, Nearchus had kept a careful log of his voyage, which added much to Greek knowledge of the geography of Asia. He rejoined the fleet, and Alexander led his army back in triumph to Susa.

Meanwhile one of Alexander's trusted officers, Craterus by name, had followed a more northerly route through Persia, at the head of the third division of the army, which joined the main body, under the young conqueror himself, at Gulachkird, and incidentally contributed to the Greek exploration of Asia.

By the bye, if you look at the map showing the routes followed by Alexander and Craterus on land and Nearchus by sea, you will notice a series of lines called 'stages in the use of monsoons.' The monsoons, as you probably know, are those winds which blow across the Indian Ocean from the south-west during the wet summer months, and from the north-east during the dry months of the winter. Very early in the Christian era a trader called Hippalus discovered that these winds could be made to help seafarers desiring to travel to and from Southern Asia. This discovery, improved upon by later generations of traders, was of great importance, and it has been claimed that "Hippalus deserves as much honour in the



From "Early European History," by Hutton Webster (D. C. Heath and Co.)

annals of antique seamanship as Columbus does in modern history."

You will remember that Alexander the Great died at the age of thirty-two, lamenting that there were no more worlds for him to conquer. He would have been greatly surprised if you had tried to explain to him that there were many countries beyond his ken. Even those of which he had heard concealed numerous secrets from him. He did not know how vast India and China really are, nor how large this globe really is. He had never heard of the Malay Peninsula, nor of any lands beyond the Mediterranean Sea, and he thought that the Caspian Sea was an inlet of some ocean into which the Ganges flowed.

In 330 B.C. an intrepid Greek seaman of Massilia, the port we now call Marseilles, decided to see with his own eyes the mysterious countries whence came two commodities very precious in the antique world—amber and tin. Amber and tin reached the centres of ancient civilization in a very roundabout way; they were used as mediums of barter by the primitive people in whose lands the trees bearing the necessary resin and the mines bearing the desired metal were to be found: and they were carried by various long and dangerous routes, passing through many hands before they were finally bought and sold by the merchants of the East and the South.

You must imagine how picturesquely unlike the civilized and the uncivilized peoples of the globe were in those days. One group lived in walled cities, with stately temples and glittering palaces: they were more often dark than fair; they wore richly woven and brightly tinted garments; they had chariots and ships, musical instruments, tools, weapons, and works of art far in advance of anything the dwellers in the North and West had ever dreamed of. The other group were more often fair than dark: they wore garments made from the skins of wild animals, and lived in wicker huts thatched with turf. Yet it would be a mistake to think of these forerunners of ours as mere savages. They understood the use of metals, and had already—in Britain—built the great stone circle at Stonehenge before Pytheas of Massilia sighted the cliffs of Kent.

Pytheas followed the coast-line of Spain and the Bay of Biscay until he reached Ushant. Thence he passed to Britain, where he visited the Cornish tin-mines and spent some time in Kent. He describes how corn was cultivated there, and how the natives drank a fermented liquor made from wheat and

honey. Following the north-eastern coast of Britain as far as Scotland, he heard of—but did not reach—a mysterious island called Thule—perhaps Iceland, perhaps one of the Hebrides group. In the course of a second voyage Pytheas seems to have reached the Baltic, the source of the greater part of the amber supply in those distant days.

One of Alexander's generals carries our tale a stage farther. His name was Ptolemy Soter (that is, Ptolemy the Saviour or Preserver), and in Egypt after Alexander's death he founded a dynasty which survived until Rome seized sovereignty. Ptolemy himself was an exceedingly able man, and he determined to realize the potential wealth of his country. He understood the importance of trade, and set about reviving the commercial reputation Egypt had earlier enjoyed. He succeeded in improving means of communication, and in establishing a remarkable position which his immediate successors sustained.

He made Alexandria his capital city. Alexander had shown foresight when he made his foundation. It stood in a perfect position to command both sea and river traffic, for trade and for defence. Look at the map and you will see. From Red Sea ports Egypt had for centuries traded with the Arabs, and Ptolemy founded other and more convenient ports in the service of this traffic. Here his caravans met his trading vessels coming up the Red Sea from the ports of Southern Arabia, where they gathered spices and perfumes and precious stones, and met the trading ships from India and exchanged wares. He built a special road for his caravans, picketed at intervals with soldiers to guard his traders and their merchandise, and any other travellers, from highway robbers. He cleaned out the old canal between the Nile and the Red Sea which had been made long ago by one of the Pharaohs, but had constantly silted up again. The Phœnicians came under his government, and he encouraged and employed this ancient and intelligent seafaring race.

A great school of learning grew up in Alexandria. Scholars flocked to the seaport, as in time past they had flocked to Athens and the schools of learning there. Alexandria never surpassed Athens in art and poetry, but in scientific research, notably in geography and mathematics, she made great strides.

Carthage, a one-time Phœnician colony and now an independent city, had meanwhile developed into a formidable

power. Her seamen had early distinguished themselves. It was through her westward trading by sea, and her trading by caravan into the interior of Africa, that other men's eyes were turned towards new horizons. As long ago as the sixth century B.C. a Carthaginian, Himilco, had reached Brittany, though his voyage was of little importance except as a record. But in 470 B.C., during the reign of Xerxes in Persia, Carthage had sent out a really important expedition. It sailed under the command of a man named Hanno, with a load of colonists, to try to colonize places on the west coast of Africa. Hanno sailed as far as Sierra Leone. The adventure was a failure as far as any permanent colonization was concerned, but the memory of it lived, though it was hundreds of years before anyone got so far down the coast again. The expedition was finally frightened off by the fact, as the sailors reported it, that the land was on fire. We know now that it must have been the natives purposely burning the undergrowth, as they do to this day. Incidentally, King Xerxes, who must have known something of the Carthaginian intrepidity at sea, once offered a disgraced Persian noble his life on condition that he sailed round Africa. The noble failed. He took advantage of the common belief of those days that the sea outside the Pillars of Hercules (the two opposite capes on what we now call the Strait of Gibraltar) was sluggish and weed-choked, and said his ships "stuck." In all probability he and his crew were terrified by the tales they had heard of the "green sea of darkness." A man might be blown over the edge of the world, or boiled alive in his ship in the scalding waters of the tropics. So he gave in, no doubt hoping that Xerxes would be merciful. He was not.

There is no doubt that the Carthaginians could have helped in the extension of geographical knowledge, but they did not, partly because they were interested in such knowledge only in so far as it affected their trade, and partly because they wished to keep their trade routes as secret as possible, in order to avoid competition. From Gades (Cadiz) they sailed through the strait, and came to know something not only of the African coast, but of the islands off the coast. They traded not only as far as England for tin, but as far as the Baltic for amber. A story is told of how a Gades trader on his way to England deliberately ran his ship ashore so that a Roman trader who was following him should not discover the way.

Let us now get some idea of how much men understood of scientific geography—that is to say, how much they had discovered about the earth itself, the why and the wherefore of land and water and air.

You can imagine that from the time men had leisure to think out anything at all they would wonder, and try to satisfy their wonder, about the world they lived in. What was it? How big was it? On how much of it did men live? What, if anything, was happening on parts unknown to them?

In the very early days it was the stars which engaged most of their attention. Astrologers, students of the heavens, were the prophets of the day. They used to imagine that they could predict earthly events by what was going on in the sky. They even believed that men's fortunes were governed by the stars, and whatever truth they did manage to hit upon was very much mixed up with magic and fairy-tales. By watching the sky they knew more about astrology (*astron*, a star; *graphein*, to write)

than they did about geography (*ge*, earth). That was a much-neglected matter. Charts of the heavens preceded by some time charts of the earth. The Egyptian and Babylonian monarchs had surveys made of their own land for purposes of trade and taxation, and on a clay tablet in Babylonia has been found a map (a fanciful affair) of the world as far as it was known in those days. The Greeks learned their first steps in

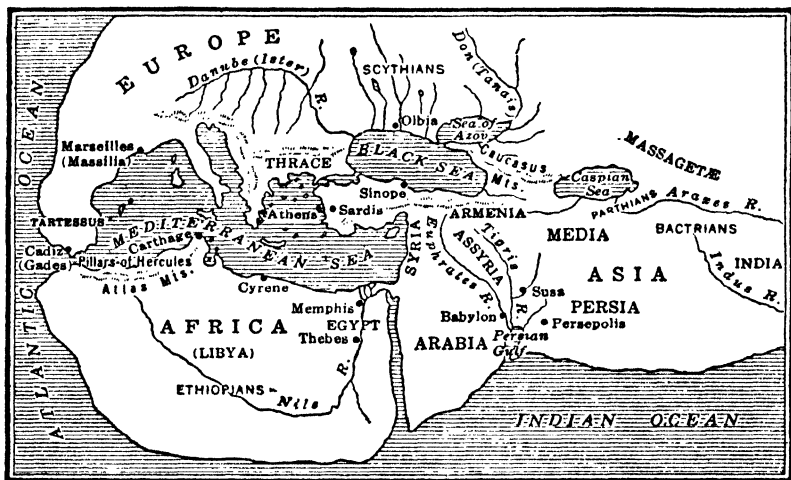


A BABYLONIAN MAP OF THE WORLD

A tablet of dark brown clay, much injured, dating from the eighth or ninth century B.C. The two large concentric circles indicate the ocean. Beyond this are seven successive projections of land, represented by triangles. Perhaps they refer to the countries existing beyond the Black Sea and the Red Sea. The two parallel lines within the inner circle represent the Euphrates. The little rings stand for the Babylonian cities in this region.

From "*Early European History*," by Hutton Webster
(D. C. Heath and Co.)

map-making from the Egyptians. Apart from elementary survey, men's minds were occupied at times with the question of how the world was shaped, and how the land and water were related. Interest in this question grew greater as traders went farther afield, and brought home tales of land hitherto out of men's ken. These traders were sometimes blown out of their course, and accidentally discovered fresh land and fresh people. Unknown tribes grew vigorous and impressed



THE WORLD ACCORDING TO HERODOTUS

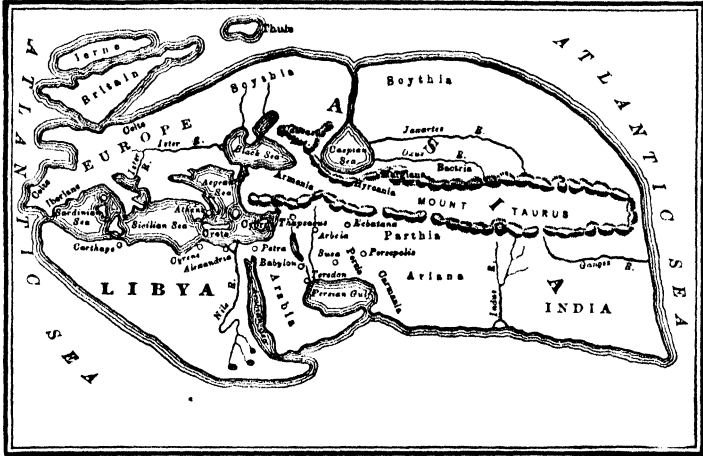
From "Ancient Civilization," by Hutton Webster (D. C. Heath and Co.)

themselves and the land of their origin on the notice of the main territories of civilization, and intercourse with them further extended knowledge. Along with this increased interest in the actual lie of the land grew the interest in the chemistry of the universe. What were air and water? What were they made of? What power had they? What, in short, *was* the world? Greece had done much to forward these speculations by the time Alexandria established her great school.

We have already met Herodotus, the Father of History, who discovered and recorded a great many interesting things. Nobody, he observed, can tell what lies beyond the river Indus. Alexander the Great proved that he was wrong.

We have also noticed Alexander the Great's famous tutor, the philosopher Aristotle, who established the fact that the earth was a sphere. It was, he taught, fixed in the centre of

the universe. Other celestial bodies circled round it. Only the temperate portion of the earth could be inhabited by man. Outside the Pillars of Hercules the water was shallow and sluggish. There had always been a mystery about the Caspian Sea. Men thought it was joined in the north to the great oceanic river flowing round the earth. Aristotle thought not, and he gave it as his opinion that its shores were certainly inhabited. His inquiries probably elicited the information that



THE WORLD ACCORDING TO ERATOSTHENES

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

traders found their way there, and Alexander's people may have heard something about it. Aristotle was still living when Alexander made his immortal drive into India; and he died the year after his pupil, 322 B.C.

About a century after the foundation of the great schools and library at Alexandria a Greek scholar named Eratosthenes became librarian. This was in 247 B.C. Since its foundation the library had grown extensively. Hundreds of copyists produced and re-produced every literary and scientific work of any note. Do you understand what a 'book' was like in those days? You are not imagining rows and rows of books as we know them, are you? Ancient books were written upon long strips of parchment or papyrus—that is, sheepskin or reed-fibre—and rolled round two cylinders. The person reading held one of these cylinders in each hand, rolling one up as he

unrolled the other. Eratosthenes wrote himself, and among the opinions which he dictated to his secretaries were these: he agreed the world was a sphere, fixed in the centre of the universe; the celestial sphere (the stars) moved round it every twenty-four hours; the sun and moon had separate movements of their own; it was too cold to live at the north of the sphere, and too hot to live at the south. He tried very hard to work out what size the earth was. His speculations upon the size of the globe drew from him a remarkable statement. He said if it were not impossible for men to sail so wide an expanse of sea as the Atlantic there was no reason why they should not sail from Spain to India. So you may get rid of the popular notion, which young people so often entertain, that Columbus was the author of this idea. Eratosthenes drew a map which was quite the best anyone had yet drawn. You can see it at page 39.

Alexandria by this time was filled with representatives of every nationality in the known world. There were scholars, merchants, craftsmen—all full of busy-ness and full of prosperity. The trading ships and caravans moved backward and forward, and one can imagine Eratosthenes gleaning from them all the information that he could get. Merchandise filled the warehouses, bringing with it the questions, “Where do I come from?” “What are the people like who sold me first?” It is unlikely that the ordinary people wondered very much about it. I expect the public then was just like the public now. As long as the ‘man in the street’ gets the comforts of life he does not wonder very much where they come from. But the men in Alexandria who were anxious to preserve and add to whatever knowledge the world possessed at the time were wide awake to the possibilities. India and the neighbourhood of the Caspian were steadily becoming better known, but there were vast regions still regarded much as we regard Mars. They existed, but it was unlikely men would ever reach them.

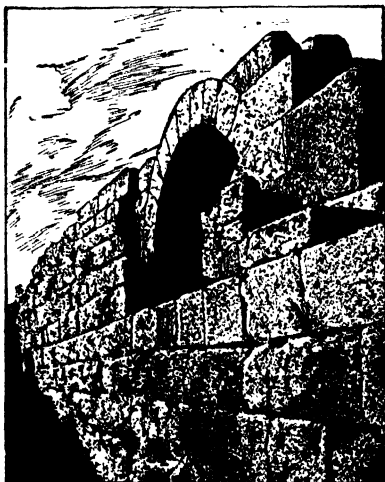
The nation to whom we must now turn will not only strengthen contact with the East, but will open up a great northern region hitherto but vaguely realized.

CHAPTER III

THE ROMANS AND HOW THEIR CONQUESTS EXTENDED GEOGRAPHICAL KNOWLEDGE

OF the tribes which swept into Europe and India and into South-west Asia from the district of the Caspian some made their way into Greece and settled there, and some into Italy. These last founded a city-state which they called Rome. The exact date of this event is difficult to decide, but 753 B.C. is the one fixed by the Romans themselves. They dated their years from it, using the initials A.U.C. (*anno urbis conditæ*, 'the year from the foundation of the city') as we use the letters A.D. (*anno Domini*, 'the year of our Lord').

All the time Greece was developing and bringing her civilization to perfection these people were developing too. During the century when Macedonia was assaulting Greece the special tribes who called Rome their capital city



WALL ON THE AVENTINE HILL BUILT
BY THE EARLY KINGS OF ROME

were busy making themselves masters of Italy. As well as facing obstruction from the Greek colonists in the south of Italy they had to contend, as all rising powers had, with the less advanced tribes round them. Among others were the Gauls to the north, a restless people and on the move, seeking a place in the sun as well. They sacked Rome in 390 B.C., and though Rome quelled these people in the end, it took her until long after the time when Alexandria was founded.

The death of Alexander and the confusion which arose after it was Rome's great chance. Greece, as you have already seen, was in her decline. She had succumbed to Macedonia, and her people still quarrelled among themselves. Rome was

shrewd enough to take advantage of this, and to play them off one against the other. She set to work, and ended by getting both Greece and Macedonia under her control. Rome was well on the way to world power. She was quick, however, to appreciate Greek brains; she had always had a respect for the Greek element in Italy. Roman boys were given Greek tutors; Greek doctors attended the Roman sick. The 'schools' of Athens (these were to Athens what our universities are to us) survived longer than Rome itself survived as a Roman city.

But Rome had another power to contend with before she was mistress of the known world. If your map is as familiar to you as I hope it is you will have noticed that the great trading city and republic of Carthage lay perilously near the rising power. Carthage had greatly amplified her possessions on the north coast of Africa. She had colonized half Spain. Sardinia and Corsica fell to her altogether on the decline of Greece, as well as the control of Sicily. Gades (Cadiz) had grown to an importance which may be likened, though in a lesser degree, to that of the great trading towns of the Middle Ages—Venice, Genoa, Amalfi, Pisa, and others which you will hear about later on. It was a place of wealthy merchants and fine buildings.

Carthage, as you know, jealously guarded her trade routes, and even forbade foreigners to enter certain of her harbours in case they should steal her monopolies. Do you know what a trade monopoly is, by the way? It means that a certain article of commerce is controlled by one man or one nation so that everybody else who wants this article has to pay for it whatever that man or nation chooses to ask. As you may imagine, this selfish policy sooner or later rouses some other man or nation to rebellion. Monopolies have caused more than one war between nations, and may cause war again.

Rome could not tolerate Carthage. She was afraid of the power so close to her, and she was jealous of it too. The clash was bound to come. Upon one pretext and another animosity grew, and while our friend Eratosthenes of Alexandria was still a boy a great war began between Rome and Carthage. While Alexandria was devoting itself to learning and trade Rome was hammering off and on at Carthage. Conquest by means of arms was not her only object, however; Rome built up as fast as she destroyed. We are told that her generals were always alive to the possibilities of commerce and development

in the countries she drew within her government. While her armies were on African soil her generals learned all they could of Carthaginian trade secrets, and of the sources of her wealth.

Eratosthenes became librarian at Alexandria in 247 B.C., and at the end of that century Carthage fell. She was not completely crushed this time, though she had to pay an enormous ransom, give up all but ten of her warships, and cede Spain to Rome. The final blow did not come till just upon fifty years later. Rome sought the quarrel. Carthage, left in peace, might have outlived her battering, but her survival was a bar to Roman ambition. Carthage put up a valiant resistance. The women even gave their hair to make the strings for the great catapults which were part of the weapons of war in those days, but all went for nothing. The Romans took Carthage and sacked it (146 B.C.). For seventeen days the blaze of this great and once prosperous city lit the countryside.

Alexandria had as yet escaped the martial octopus, and now reigned queen of the Mediterranean towns.

Hipparchus, an Alexandrian astronomer, was able quietly to pursue his researches in the library of the undisturbed city. He expressed the opinion that there was no reason for believing the earth was compounded of land surrounded by water; he even thought it might be a ring of land surrounding the various oceans. As for map-making, he spent most of his time criticizing Eratosthenes, but he did good service in improving the chart of the Mediterranean coast-line. While he was at work Roman officers on service in North Africa were bringing in further information about the country, but an especially notable traveller was Polybius, a Greek in the Roman service who took part in the siege of Carthage. His commanding officer sent him in command of an expedition round the coast of Africa, and he probably reached Cape Sparte or a little farther. The problem of the source of the Nile occupied Roman thought, and Roman theories might



ROMAN WAR GALLEY, ABOUT 30 B.C.

have saved eighteenth-century Europe a great deal of speculation had they not become discredited.

Polybius travelled in Gaul and Spain; he believed in Pytheas, and he wrote an interesting account of the countries and people that he visited. He had a real *flair* for geography, which the Romans as a whole had not. They did not contribute valuable scientific treatises to the subject. But their conquests interested them practically in the countries they controlled, and their descriptions of these countries rendered a real service to human knowledge.

Some attempt was made at this time to gain further and first-hand knowledge of India. About the year 130 B.C. Eudoxus, a cultured Greek, was sent on official business to the court of Alexandria. While there he interested himself in the geographical questions of the day, and he had great ambition to make a voyage himself. He had some thoughts of sailing round Africa, which men of those days believed was possible. Then a curious thing happened. One of the guards stationed on the southern coast of the Red Sea brought a shipwrecked mariner to court. He said he had found the man starving, the sole survivor, beside the wreckage of his ship. The sailor was an Indian. The court bided its time, and when the man had picked up a little halting Greek he managed to tell them the whole story: how his ship had been blown out of her course and wrecked on the coast of Africa, and how one by one his fellows had all perished from exposure and lack of food. He offered to pilot a ship to India if Ptolemy, the ruler of Egypt, would equip an expedition.

Eudoxus felt his chance had come. He offered to command the expedition. Ptolemy agreed; and off it went. Eudoxus reached India, and returned safely, bringing a cargo of spices and precious stones with him, which Ptolemy promptly appropriated in its entirety. Fortunately Ptolemy died almost immediately, and his wife, the regent for his son, sent Eudoxus out again. Again he was successful in reaching India, but on his way back he was blown out of his course, and found himself off the coast of Africa a little south of Cape Guardafui. He landed and discovered the remains of a wreck. The natives told him that the ship had come from the westward. Eudoxus shipped the prow of it and sailed home. The prow, a horse's head, was recognized as belonging to a ship of Gades. His cargo he lost again, for while he was away Ptolemy's son had

seized the reins of office from his mother, and now emulated his father's example. Eudoxus perhaps was discouraged. At any rate, he voyaged no more to India, but returned to his ambition to sail round Africa. He actually sailed, and was wrecked somewhere a little south of the coast of Morocco. He built another boat out of the wreckage, intending to persevere in his journeying, but the impracticability of continuing much farther was soon evident, and he returned home. He made yet another attempt in which he and all his people perished.

It has already been related how a Greek trader named Hippalus discovered the short cut to India by standing out to sea, instead of hugging the coast-line all the way from Arabia. He had recognized that in summer a south-west wind and in winter a north-east wind blew with perfect regularity across the Indian Ocean. There should be no more creeping laboriously round the coast. The monsoons in future would direct the course. The discovery created a revolution in eastward sailing: "Hippalus's Passage" became the regular route. Hippalus made another contribution to geography, for he discovered in the course of his voyage that India was a peninsula.

I am going to carry you now into the century in which Hippalus lived, the last century B.C. It was one of the great centuries in the world's history, and geography made immense strides. At the end of it Jesus was born. By the beginning of it Rome by conquest, annexation, bequest, and treaty had not only possessed herself of Italy and the Carthaginian territories and of Greece and Macedonia, but had a foothold on the opposite side of the Adriatic and in Asia Minor, and had extended her Italian territory like the thrust of a fist into Gaul. The year 100 B.C. was heralded by the birth of Julius Cæsar, in the month now called after him July. When I mention his name you know what is coming.

The earlier history of Cæsar is so interwoven with that of his great rival, Pompey, that we cannot consider them apart. They are involved together in the fate of Alexandria, and although it is Cæsar who marches north and familiarizes us with new territories, Pompey's exploits have a peculiar interest too. The two men were fated to be rivals and antagonists: Cæsar's attempt to conciliate Pompey by giving him his only daughter in marriage had no enduring results.

Pompey added to the Roman conquests. In Africa, where people were beginning to recover from the catastrophe of

Carthage, he successfully re-established Roman authority. An amusing incident occurred during this campaign. A soldier stumbled upon some buried treasure. Evidently some fleeing Carthaginian had hidden his wealth in the hope that some day he might have the chance of digging it up again. This find fired the soldiers with a lust for treasure, and the whole campaign was held up while they dug feverishly over the district. Pompey surveyed the picture of his sweating, grubbing soldiers, and roared with laughter. At last they too realized how ludicrous a scene they presented, and returned crestfallen to the real business in hand. When that was over Pompey thought it was a pity the wild beasts of Africa should not have a taste of Roman power too. So he spent some days hunting lions and elephants. Possibly the wild beasts were properly impressed. We are not told.

His next exploit carried him to sea. The Mediterranean was overrun with pirates. They had taken advantage of civil war in Rome, and her preoccupation with other affairs, and of the downfall of Carthage, their natural master hitherto, and had ensconced themselves in great power and state in Cilicia, on the south coast of Asia Minor, and also in the island of Crete. Cilicia was their headquarters.

They had watch-towers and hiding-places all along the Mediterranean coast, whence they sallied forth in light, swift-sailing vessels luxuriously equipped with purple sails, silver-plated oars, and gilt decorations, and with minstrels and dancing-girls on board. Merchant vessels had no safety at all. These ruffians raided seaports, and even went so far in audacity as to march inland and rob villages and country houses. Worst of all, the Roman markets suffered. The pirate band numbered something like a thousand, and they had already taken four hundred towns into their possession. If they caught a Roman citizen they greeted him with mock courtesy; then, taking him out to sea, they put the ship's ladder over the side, offered him his freedom, and wished him a pleasant journey by way of the ladder.¹ If he refused it they pushed him into the sea without further ceremony. Something had to be done,

¹ The most famous Roman whom they ever captured was Julius Cæsar himself. Instead of killing him they held him for ransom, and during the time he was the unwilling guest they were on quite good terms. He used to write poetry and make them listen while he read it aloud to them. They did not believe him when he swore that after he had been ransomed he would return and have them all soundly punished; but he kept his word. That was Cæsar's way.

and Pompey with a fleet of five hundred ships set about doing it.

The invincible Pompey had his way, and the pirates sued for mercy. For some reason or other they received it. Pompey probably thought that so much energy and enterprise might be turned to better account, and he extended Cilicia's territory on condition that the inhabitants allowed the pirate families to settle in their thinly populated towns.

Meanwhile the Roman prætor (judge) of Crete was engaged in ridding the island of the other pirate stronghold. The pirates appealed to Pompey, and Pompey, having now undertaken the rôle of pirates' patron, actually sent an officer to tell the Cretan prætor to hold his hand. That spirited gentleman decided he had as much right as Pompey had to distinguish himself in the pirate business, and so he heartily told the officer, expelling him and pirates alike. We have by no means heard the last of Mediterranean pirates, but for the time being they were sufficiently cowed.

Pompey was now at a loss for occupation and seeking whom he might devour, so he turned his attention to Asia Minor. He distinguished himself there, profiting by former Roman conquests, adding to them, and marching as far as the Euphrates in the south and the Caspian Sea in the north. The Caspian had already received some attention from writers on geography and travel. Pompey explored territory between the Black and Caspian Seas, and gathered further information about the traders who reached the Caspian in order to meet other traders who arrived by way of the river Oxus from India.

While Pompey is engaged elsewhere we must follow what Cæsar has been doing. He is overrunning Gaul. The full extent of his campaigns will introduce us to what is now France, to the south of England, and to the borders of Germany.

The whole trouble had been begun by the determination of an ambitious tribe, occupying territory which is now Switzerland, to obtain the sovereignty of Gaul, and to start their campaign by marching through a Roman province in Gaul. Cæsar prevented this, but the tribe went elsewhere in the same spirit, and other Gaulish tribes, suffering at their hands, appealed to Cæsar, who subdued the offender. Chiefs from all over Gaul came to Cæsar to discuss the situation. This particular tribe had been subdued, but it was not the only one which had aimed at supremacy. Two others had joined

together, and had invited German border tribes to help them. These German auxiliaries were a terrible thorn in the flesh of other Gauls. When they won they took hostages, whom they treated badly, and they extracted from the vanquished Gauls the promise that no appeal should be made to Rome. The principal chief among the Germans had seized land belonging to Gaul, and had settled many of his people within its more fertile borders. As many as 120,000 Germans were now on Gaulish soil, and fights were constant.

So Gaul told Rome how afraid she was of the Germans. They were a wild people—not nearly up to Gaul's standard of living. They clothed themselves in skins, lived on milk and flesh, and would not settle longer than a year in one place for fear that easy life and agriculture might tame their martial ardour. Even traders were allowed among them only for the purpose of buying slaves and other loot of war. They would permit no wine, no luxuries.



A ROMAN COIN WITH THE HEAD OF
JULIUS CÆSAR

From "Ancient Civilization," by Hutton Webster
(D. C. Heath and Co.)

Such people might eventually endanger Rome. Cæsar decided to aid the Gauls, and he sent a message to the German chief that he must

withdraw his people from Gaul and keep them within his own borders, or answer to Rome for his disobedience. The chief replied, obviously enough, that it was customary for a conqueror to keep what he conquered and to dictate to the conquered—the Romans did it themselves. For his part, he did not order the Romans about, and they had no business to interfere with him. Moreover, if it was unfair for the Germans to cross the Rhine into Gaul it would be unfair of Rome to cross it into Germany. The Gauls should pay the tribute they owed or suffer for it. If the Romans wanted a fight—let them come on!

Whatever Cæsar may have thought of this reply, its spirit impressed his troops. The traders who travelled about the country and the Gauls moving about the Roman camp did not improve matters, for they spread such tales of the size and ferocity of the Germans that even old campaigners were shaken. Cæsar made a speech. If they were afraid, very well, let them

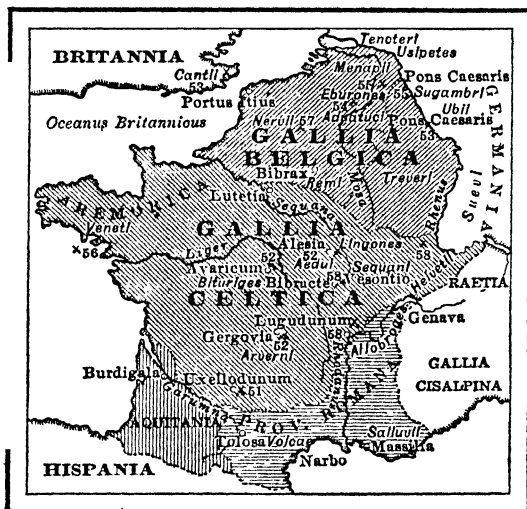
stay behind. He would take the Tenth Legion, upon whose loyalty and courage he knew he could depend, and fight the Germans just the same. The Tenth Legion was transported by this praise, and assured Cæsar they would follow him to the death. That shamed the rest, and the end of it was that the Germans for the time being were routed.

Part of Gaul, having now put itself under an obligation to Cæsar, must be reckoned as an ally, but all Gaul was not of the same mind. To the north were the Belgæ, a tribe as brave and abstemious as the Germans. They viewed with anything but favour the presence of Roman troops in Gaul and the insidious increase of Roman influence.

So the Belgæ rose. Some of these tribesmen were descended from Germans who had settled in Northern Gaul much earlier. It is likely that there was a more

or less constant leakage from Germany into the more fertile country of Gaul. At any rate, they were an uncompromising lot, and they met Cæsar in action just north of the river Aisne. Cæsar won, and the Belgæ were obliged to submit for the time being.

No sooner was this matter settled than another tribe arose. They were a seaboard people, occupying what is now Southern Brittany, called by the Romans 'Aremorica.' They were skilful seamen, and accustomed to take their ships to Britain. Cæsar was in for a naval battle. He had to build ships, which he constructed on the Loire, and, sailing from its mouth, set out to attack the Bretons in their sea-coast fastnesses. But the



GAUL IN THE TIME OF CÆSAR

The map shows the probable sites of Cæsar's bridges across the Rhine and of his landing in Britain.

From "Ancient Civilisation," by Hutton Webster (D. C. Heath and Co.)

sailors of the landlocked Mediterranean knew nothing of the Atlantic. Their ships were the wrong build for ocean sailing. The Breton ships were high-prowed and high-sterned, built to break the waves, and their sails were of leather to withstand the gales. The good old Mediterranean tactics of ramming were ineffectual here. The Breton ships towered above the Roman galleys, and the soldiers found it almost impossible to fling their darts upward and over the enemy's side—a restricted type of fighting not at all to their mind. But it took a good deal to disconcert the resourceful Roman. The Bretons depended upon their sails. Very well, then—they would be more or less helpless on a calm day. So the Romans waited for a calm day, and attacked again. Now they were able to bring their grappling-irons into play, and the day went to Rome.

Engagements with other tribes followed, and with the Germans too. Cæsar threw two bridges across the Rhine and chased the Germans as far as he dared, but into their dark and unknown forests he would not venture.

He now determined to make an attack upon Britain. There was no excuse for this attack except the slight provocation that the Britons had sent some help to the Gauls. He knew very little about the country or about its people. He tells us himself, "Nobody except traders journey thither without good cause, and even traders know nothing except the sea-coast and the district opposite Gaul." He knew that British auxiliaries came over and fought for the Gauls at times. He knew that the Druid priests in Gaul had their headquarters in Britain, and he had heard of Pytheas's voyage. He set about questioning the only people who were likely to be able to give him further information—the traders. What were the people like? How did they fight? What harbours were there?

The traders could enlighten him very little. Possibly they pretended ignorance, but he gathered from them that Kent was the most civilized corner of Britain. The traders from Gaul landed on that coast. A Gaulish manner of life prevailed, whereas inland the people still dressed in skins and grew no corn. But even in Kent woad was still in fashion.

On their next trip across the Channel the traders warned the Britons that Cæsar was making preparations to visit them. So the Britons sent envoys to Cæsar with soothing promises of welcome. As a matter of fact, a powerful tribe had been seeking supremacy, but now the common danger united them all

in this politic message. They certainly welcomed Cæsar, but it was a little differently from what he expected. 'You are all familiar with Cæsar's two expeditions into Britain. He did not really get very far with the Britons. The first time, you remember, they flung javelins at him from the Dover cliffs, and when he sheered off to land farther down the coast fought him in the water. He had his way, landed, and parleyed with the Britons. But summer was waning, and he had to get back across the Channel while the weather was still calm. Moreover, Gaul was restless again. The second time he crossed, his men having built over six hundred ships in record time for the purpose, the Britons were staggered at the immensity of the fleet and took refuge inland. Cæsar got as far as the Thames. He found fighting Britons no child's-play. Their method of warfare was distinctly disconcerting. They rushed up in their chariots, the wheels of which made a horrible racket (apart from the fact that they had scythes attached to them), and crashed through the soldiery, laying about them from any point of this glorified cart—inside it, outside it, running along the pole, standing on the yoke, leaping back into the body again—a circus performance which dazzled the Roman soldiery on one occasion to such an extent that they had to be taken back to camp to be calmed. Another dodge told even better. They leaped out of their chariots and fought hand to hand, while the charioteers drove off and waited on the outskirts of the battle. When the Britons had had enough they rushed back to their chariots, and drove away into their woodland fastnesses. Cæsar got tired of this guerrilla warfare. He gained sufficient mastery to demand hostages, and departed to Gaul, which was up in arms again. Only two of the British tribes, however, sent the promised hostages.

A general rising of Gaul followed under the hero Vercingetorix. It availed Gaul nothing except to vindicate her courage, and there her protests perforce ended.

It is interesting to compare Cæsar and Alexander the Great, the two great soldiers who extended geographical knowledge, the one to the north, the other to the east. There was a great difference in age. We are discussing Cæsar as a middle-aged man. Alexander was barely in his thirties before his meteoric career was over. But age does not explain the difference. It was a question of character and of statesmanship. Cæsar surpassed Alexander in both, and would have done so at any time

of his life. They both aimed at conquest and personal glory, but Cæsar successfully consolidated his conquest, and Alexander did not. You realize how young the world still was in Cæsar's day when you read what he tells us himself about Gaul. He describes how all the instruction the young people received in Gaul was given by the Druids, and went little beyond the recitation of their folk-legends. They used Greek letters for their private accounts, which they had learned from Greek traders, but had some idea that writing things down ruined the memory, which is, of course, true. All the knowledge they did possess was therefore passed down by word of mouth. A mixture of Greek and Roman mythology coloured some of their ideas. They had their astrologers, who studied the stars and made some attempt to realize the size of the earth, but they still offered human sacrifices. They used coins, again a legacy from traders (the southern and eastern districts of Britain, to which Gaulish influence had spread, used coins for the same reason), though clumsy iron weights were currency too.

Cæsar built roads. He took measures to protect the path through the Alps used by traders, who were sometimes robbed and always had to pay heavy tolls. He astonished the Gauls by the rapidity with which his well-organized working parties could build ships and bridges and instruments of siege warfare. He left the Gauls a great deal to think about.

I need not tell you the rest of Cæsar's story. You know how, after crushing more than one Gaulish revolt, he was recalled to Rome by the Senate, at the instigation of Pompey, and boldly refused their commands that he should disband his army. You know how three months later, after driving Pompey out of Italy, he became master of Rome: you remember the great battle of Pharsalus (48 B.C.), which sealed Cæsar's triumph.

We will not linger over his victories in Africa, his smashing defeat of Pompey's friends Scipio and Cato. A great statesman and thinker as well as a great soldier, he planned wonderful things for Rome, and had the dagger of Brutus not cut short his career at its highest peak of glory he would have built a library rivalling the famous library of Alexandria.

Cæsar's nephew Octavius became Emperor, and was called Augustus (the Majestic). He was destined to carry Rome to her Golden Age. Augustus turned his attention to perfecting the means of communication throughout the Empire. Great

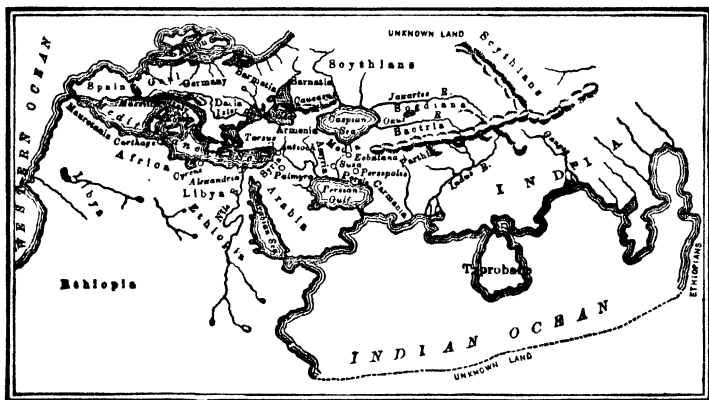
roads spread in every direction, and "all roads led to Rome." Along some of these roads, marked every mile with a stone, post-inns stood, each provided with relay horses. It was possible to travel a hundred miles a day. The post-houses were for the especial service of the officials, but it was possible for private people to obtain use of them in matters of urgency. Pickets of soldiers at regular intervals protected all travellers. Commerce made great strides. Flourishing towns arose in the provinces. Ships sailed annually from the Red Sea to India. These ships were cowl-built—that means their planks were fitted edge to edge: the clinker-built ship, with overlapping planks, came later. Caravans streamed across the deserts, bringing the wealth of the world to the Roman receiving stations.

Chinese traders reached a point called the Stone Tower in the neighbourhood of Balkh, in North Afghanistan, and brought their lovely silks, embroideries, and pottery to exchange for amber, coral, precious stones, and the Persian carpets. We are told they used the method of dumb trading, as did the Carthaginians with the African natives. The sellers, arriving at the rendezvous alone, would lay down their goods and depart. The buyers would then appear, lay down the money or goods which they were prepared to exchange, and would also go away. The sellers then returned, and if the price paid met with their approval they took it and left the goods. If the price was insufficient the performance was repeated. The custom of such trading arose because there was no little danger in early times of kidnapping for the slave-market.

The amber was brought to market from the south coast of the Baltic, whence it had been traded even in Phœnician times. Now it came to a trading port on the north coast of the Black Sea, and from here it reached the markets of Asia and Europe. There was also a trading post on the Caspian Sea at the mouth of the river Oxus (the Oxus has changed its course since then, and now flows into the Sea of Aral), connecting with the Chinese and Indian trade routes. From the Caspian meeting-place European traders returned to the Black Sea, and through the port of Byzantium to Alexandria, the great receiving station for Europe. The wonderful harbour of Alexandria was filled with shipping. All the wealth of the known world reached Rome.

Egypt herself produced paper, bricks, alum, beer, black

basalt, and red granite. Craftsmen of all nations worked in the town. Glass-blowing had been recently discovered, and had greatly cheapened glass as an article of commerce. Down the Nile from the interior, busy with traffic, and along the desert caravan routes from the Red Sea ports came ivory and tortoise-shell from Ethiopia, precious stones and unguents from Arabia, and pearls from the Persian Gulf. Through the great market of Damascus, in Syria, came jujube-trees and truffles from Jerusalem, Persian horses, and carpets and cloth.



THE WORLD ACCORDING TO PTOLEMY, A.D. 150

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

("Syrians are a rotten race," a disgruntled Roman soldier, doing sentry-go on the trade route, scratches on a stone which came to light a little while ago.) From India came steel, ivory, more precious stones, rough cloth and cottons; from Britain tin, pearls, oysters, baskets, and fleeces, hunting-dogs, cattle, and slaves. Marble, olive-oil, honey, and perfume from distilled flowers came from Greece; wine and oil from Italy. Hunting-dogs came also, by way of Gades, from the Canary Isles. That last item will probably surprise you unless you remember that the Carthaginians were in touch long ago with the isles off the coast of Africa, and that the Romans had been wresting these secrets from Carthage. More than one geographer had already described islands in the Atlantic, and two of these isles are obviously Madeira and Porto Santo, not the Canaries. At the time of which we are writing we have a more definite description of the Canaries. It was written by

a native of North Africa whose father, Juba, had been King of the Numidians. ('Numidian' was a Greek name which originally meant 'nomad.' The Romans used it as a proper name.) Juba had helped Pompey during his struggle with Cæsar, and Cæsar had deprived him of his kingdom. His son, a child also named Juba, Cæsar had educated at Rome, and he became a friend of Octavius. When Octavius succeeded Cæsar he gave back a large portion of north-western Africa to Juba II. This King of Numidia was deeply interested in geographical affairs. He wrote a good deal about Africa, and originated the long-dying theory that the Nile wandered right across Africa and entangled itself with the Niger. He collected all the information he could about the Atlantic islands, and sent out an expedition of discovery.

There are six islands, he tells us, and five have recognizable Latin names. These five are Ombrios, Junonia, Capraria, Nivaria, and Canaria. Canaria was where the dogs came from—hence the name (*canis*, Latin for 'dog'). Like so much of the learning which the Roman world possessed, the knowledge of these islands was almost to disappear, not to be rediscovered until many centuries later.

During the reign of Augustus his son-in-law, Marcus Vipsanius Agrippa, superintended the completion of a great road-map of the Empire which Julius Cæsar had ordered to be made. Agrippa had done good service in planning the great new roads for Gaul, the people of which, guarded from the Germans by the Roman army on the Rhine, were now fast building towns and developing rapidly in general. Augustus had a copy of the map engraved on the colonnade wall of his sister's house. Here the Roman citizen might gaze upon the great extent of the Empire and examine the ramifications of her all-embracing road system. It was already a fashion to paint maps on walls. It is a pity it is not popular to-day.

As for general ideas about geography, men still believed that the world was surrounded by a great river of oceanic dimensions, and that the Caspian Sea and the Mediterranean were just inlets into this river. In about 63 B.C. was born one of the greatest of the early geographers—Strabo. His name means 'squint-eyed,' but we do not know whether it was a nickname or a family name. He thought that there might be other people living in parts of the world yet unknown. He had hardly any knowledge of the untamed Britons whom Cæsar

had attempted to subdue. That did not matter very much, for the doors were open, and civilization was steadily approaching the little island whose great future was still wrapped in the clouds of time.

Strabo's great work on geography, filling seventeen volumes, is based largely on his own observations, though he depends upon Julius Cæsar for information concerning Britain, and gets much help from earlier geographers such as Eratosthenes. His ideas about the shape and character of the countries forming the continent of Europe were rather vague; he describes the Pyrenees as an "unbroken chain of mountains stretching from north to south," and he thinks that the south coast of Britain runs from opposite the Pyrenees to the mouth of the Rhine. He also believed that the Caspian was an inlet or bay of some mighty, world-encircling ocean.

CHAPTER IV

GEOGRAPHY IN THE SECOND CENTURY A.D.

IN Rome at the time of Christ's birth there was a conventional State religion, modified in the minds of educated men, but full of superstition in the minds of simple people. Outwardly all sacrificed to the different heavenly patrons of war and learning and agriculture and commerce; and even educated men were much more swayed by omens and fortune-telling and the like than educated men are to-day. Moreover, the law, knowing the necessity of having some religion to guide people—something more mysterious than the matter-of-fact discussions of the philosophers—protected the State religion, and resented interference with its observances. The reigning Cæsar was adored as a god, and it was a form of treason to refuse to offer incense before his image.

Other nations within the Roman Empire had their own ideas about religion too, which the Romans respected; so it was that the teaching of Christ took a long time to spread even in the world of that time, which looks so small on our maps. It was not until over three hundred years after the death of Christ that the first Christian Emperor reigned over the Roman Empire, still the supreme political power. When Christianity did gain a hold upon Europe it played its part in geographical history, for the missionaries and the pilgrims and the Crusades did much to popularize knowledge of men and countries, though, as you will read later, Christianity from the most pious motives definitely set the clock back as regards geographical science.

Rome reached the peak of her power in the reign of the Emperor Trajan (A.D. 98-117). His campaigns in Transylvania led to the opening up of a new route to the Black Sea through Moldavia. During the course of the second century geographical knowledge, trade, and the means of communication made much progress. England was a Roman province by then. Traders moved freely all over the country. The Roman soldiery and the colonists needed the comforts and the luxuries they had been used to, and their presence gave impetus to northern trading. Some adventurous traders crossed to

Ireland, and brought back information about the people and their harbours, as well as swift Irish hounds. Rumours had reached the centre of the Empire of vast 'islands' in the northern seas. The Scandinavian people were beginning to make themselves felt. The traders who went to the Baltic to barter for amber must have heard about the Swedes just across the water. Probably they came into personal touch with them, and the Romans in Gaul, with their thirst for information, would soon get wind of such things.

Intercourse with the East, owing largely to the enterprise of Greek merchant-mariners, had rapidly increased. Every midsummer, just before the rising of the dog-star, a trading fleet sailed from the Red Sea to the Malabar coast of India. Cohorts of soldiers sailed with the fleet, for pirates lay in wait in their strongholds on the coast. The return journey began in December or January. The ships carried from India cargoes of pepper and spices, silks, pearls, rice, cotton, beryl, which they had exchanged for linens, coral, glass, copper, tin, lead, and wine, collected from all parts of the Empire, and for coin (for the money-changers had their tables in the trading ports). Any number of Roman coins have come to light in India, brought there by these merchants of long ago. Strabo reported that a hundred and twenty ships were engaged in this Indian trade in his time.

A Roman commercial embassy, sent on the strength of a report from a Greek merchant, had reached the confines of Annam, bringing ivory, tortoise-shell, and rhinoceros-horn as an inducement to open direct trade intercourse. A daring mariner found his way to the Straits of Malacca, the goal centuries after of Portuguese ambition, and other merchants followed in his wake and reached Sumatra, Java, and even China itself, as far as Canton. The Chinese in their enormous trading junks, which held, we are told, upwards of a thousand people, were busy among the Spice Isles and on the coast of India and Ceylon. The Chinese, indeed, were already printing from wood blocks, and they had a taxi-cab, though not a self-propelling one.

In the second century had flourished a very famous geographer. None greater arose for many a long day. His name was Ptolemy. I want you to remember it especially, because he had great influence upon geographical ideas, not only in his own time, but also later on, both upon Arabian scholars,

who when the last hold of Rome gave way took the lead in the world of learning, and upon Europe when a new Europe, long Christianized, became supreme in scholarship. He is a link between us and the world of the Roman Empire.

Ptolemy was an astronomer and mathematician, and lived at Alexandria between 139 and 161 A.D. His was a peaceful day, and commerce prospered greatly, as it is wont to do in peace-time. His map shows that the long-vexed question of the Caspian is settled; it is shown as an inland sea. Again, this map reflects the increased intercourse with the East. Ptolemy knew something of a land beyond India. He knew of Ceylon, called Taprobane or Cabodanea by Western folk, though he drew it much too large. He gave the Swedes only a little island in the northern sea, but their existence is established. One of his most interesting statements was about the sources of the Nile. As I have told you, this problem had long exercised the minds of geographers, and Ptolemy actually knew more about it than was known for seventeen centuries afterwards. He got his information from several sources—previous geographers, Roman officer explorers, and the ubiquitous trader. An important expedition, which is an example of one of the rare occasions when a journey in these times was undertaken purely or largely for the sake of exploration itself, was one when Roman officers set out in the middle of the first century A.D. to seek the source of the Nile. The country was already known as far as Merœ. The explorers, helped by the good offices of the King of Ethiopia, who passed them on with kindly recommendation to his brother rulers, ascended the White Nile to the great marshes which block the way just before the point where the river Sobat joins the Nile. Here they were obliged to turn back.

Ptolemy stated that the Nile rose from two great lakes in the interior. That piece of information he deduced from the tales of Greek traders who visited a trading town called Rhapta, on the coast opposite the island of Zanzibar. One of them, named Adulis, was credited with having ventured as far as the lake now known as Victoria Nyanza.¹ Certainly the natives told the traders many tales of the interior. Ptolemy knew there were great mountains on the equator so high they were snow-capped. He called them, in Greek, the Mountains of the Moon, which one of our authorities suggests is a translation of a

¹ The word Nyanza means 'lake.'

native name. Ptolemy knew also of a lake in the Abyssinian highlands, obviously Lake Tzana. Roman officers of the first century after Christ had also crossed the Atlas Mountains and penetrated into the Sahara.

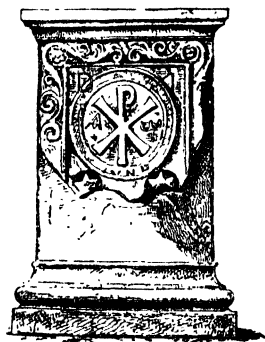
Ptolemy was much indebted in his work to another geographer who lived a generation before him. His name was Marinus. He was a citizen of Tyre, a city now long under the jurisdiction of Egypt, you will remember. The map he drew was lost, but it was acknowledged by his contemporaries as a great service to geography. So it is probable that Ptolemy's map is not entirely original. To-day a child can find glaring mistakes in this map; but it was one of the maps men turned to when, hundreds of years later, they had bold thoughts of challenging the Atlantic. From the time when the world was first recognized as a sphere men realized that if one started from a point and went straight on for long enough one was bound to get back to that point again; therefore, if one could get to India by sailing east one could get to it by sailing west. The idea was in men's minds a long, long time, only to be brought to fruition by the labours of Columbus and Magellan. Ptolemy, knowing nothing of America, placed the eastern and western lands of the globe much closer together than they really are, and this circumstance probably encouraged Columbus when he gazed at Ptolemy's map and his imagination was fired by the possibilities of sailing to India as the crow flies. Ptolemy divided the world into parallels of latitude, counting from the equator, and into parallels of longitude, counting from the island of Ferro, in the Canaries. This island was the most westerly point within his ken.

By the time Constantine reached the throne (in the year 306) the Empire had many enemies, both actual and looming ahead. In the time of Trajan, when its generals were leading the Empire to the highest peak of its vigour, a people destined to cause much havoc was stirring in the great plains of Europe. They were the Huns. In the century preceding Constantine's succession they had so harried the East that China had built the celebrated Great Wall in an endeavour to keep them out. The wall was about 1500 miles long and some twenty feet high. For a time China managed to check the Huns, who turned west, reached the Caspian, and from there steadily approached Europe, pressing before them the Goths, who, as refugees, fled across the Danube into Roman territory. The Romans took

advantage of the Goths' plight, and sowed the seed of hate and rebellion the harvest of which they were to reap so bitterly.

Enemies abroad were not the Empire's only danger. Though, like Charles II, the Empire was an unconscionable time a-dying, and would in flashes produce able Emperors and brilliant generals, it was definitely in decline. Many incompetent and vicious rulers had allowed personal ambition and private feuds to overrule their duty to the State, and at times the political story of Rome reads like the highly coloured tales of Asiatic intrigue. Civil war was often the result, and the Empire's reputation was damaged and her strength undermined.

Constantine was one of the few shining lights in the history of Rome's eclipse. He took more than one momentous step. In the first place, he became a Christian. His predecessor, Diocletian, had persecuted the Christians. This sect had slowly but surely worked its way into prominence, and its strength threatened to disorganize the prevailing faith of Rome. Diocletian was no villain. He persecuted the Christian Church because he felt



PAGAN TOMB TRANSFORMED
INTO A CHRISTIAN EMBLEM
BY THE ADDITION OF THE
MONOGRAM OF CHRIST

its activities would be a danger to the "ancient and hereditary religion of the Empire." We may deplore his lack of inspiration, but we must see his point. Whether Constantine acted from genuine conviction or from motives of policy, or was influenced by his pious mother Helena, we do not know. But we can imagine what a revolution his action occasioned in the attitude of the public towards the new faith. It had received recognition from Cæsar. All the educated world regarded it with new interest. People who had never thought about it at all began to make inquiries. Devout and humble Christians breathed a sigh of relief and thankfulness, and presently their thoughts began to turn towards the Holy Land, the scene of the Nativity, of Christ's life on earth, of His death and Resurrection.

Pilgrimages to the Holy Land became the order of the day. It was the Queen-Mother Helena who set the example, and started a custom which became such a feature of the early

Middle Ages. On her visit to the Holy Land she discovered there what she believed to be the remains of the Cross. A burst of enthusiasm spread through Christendom. Other devout people, numbers of them women, from all classes of society, followed her lead and performed long, toilsome journeys sometimes of several years' duration. Many and various were the holy relics they collected and brought home, and endowed with miraculous properties. The earliest guide-book



COIN OF CONSTANTINE
THE GREAT

This shows the sacred military standard (*labarum*) which was adopted by Constantine and carried by later Christian Roman Emperors.

From "*Ancient Civilization*,"
by Hutton Webster
(D. C. Heath and Co.)

we know of was one which somebody wrote for pilgrims, describing the route from Bordeaux, where so many of them embarked, to Syria.

These pilgrims were quite a different type from the Crusaders. They were peaceful folk who had no danger to contend with except the ordinary dangers of early travel—rough roads, robbers, lengthy and uncomfortable sea journeys. The Turk had not yet made his appearance in the Holy Land to subject pilgrims to insult and rough usage, and the Holy Places to sacrilege, which later on roused Christendom to armed retaliation, and produced the great warrior-travellers.

Apart from the travels of these pilgrims, which all helped both to advertise Christianity and to familiarize a great number of people with foreign lands who but for their pious impulse would not have moved from home, you can imagine that missionary enterprise received a great impetus from the new power Christianity obtained in becoming the State religion. Missionaries found their way even to the Mongols in Central Asia. These particular missionaries were members of a sect called Nestorians—for, alas! the Church was already splitting up into divisions. One would observe this particular ceremony, but would not observe another. One would interpret certain words of the Gospels in such a way; others thought they knew better. So began the long struggle which is not ended yet.

Constantine took another step which had far-reaching effects both upon the development of Europe and upon the history of the Church. He moved the capital from Rome to Byzantium, which was now more central for the direction of Empire affairs. He set about improving this city with universities,

libraries, theatres, and every magnificence the Roman looked upon as his due. He founded the Church of Santa Sophia.¹ The city was rechristened after him Constantinople.

Rome was left under the charge of Constantine's partner in government. The almost inevitable result followed very soon. Thirty-four years later the Empire split in two, and Rome lay at the mercy of the barbarian. The division of the Empire divided Church government. Rome and the Western world began to develop upon separate lines. The Christian religion in Constantinople, influenced by its surroundings, became the Greek Church, as opposed to the Roman.

The picture of Europe will in the next few centuries change like a kaleidoscope, and in the pattern you will see the future nations. The map will be delineated by marching armies. The adventures of commerce, until the rise of the maritime city-republics in the Crusading era, will pass out of European control. The centre of learning will shift to an ancient anchorage in south-west Asia. The Empire will have no energy, and the budding nations no inclination, for the industries of peace.

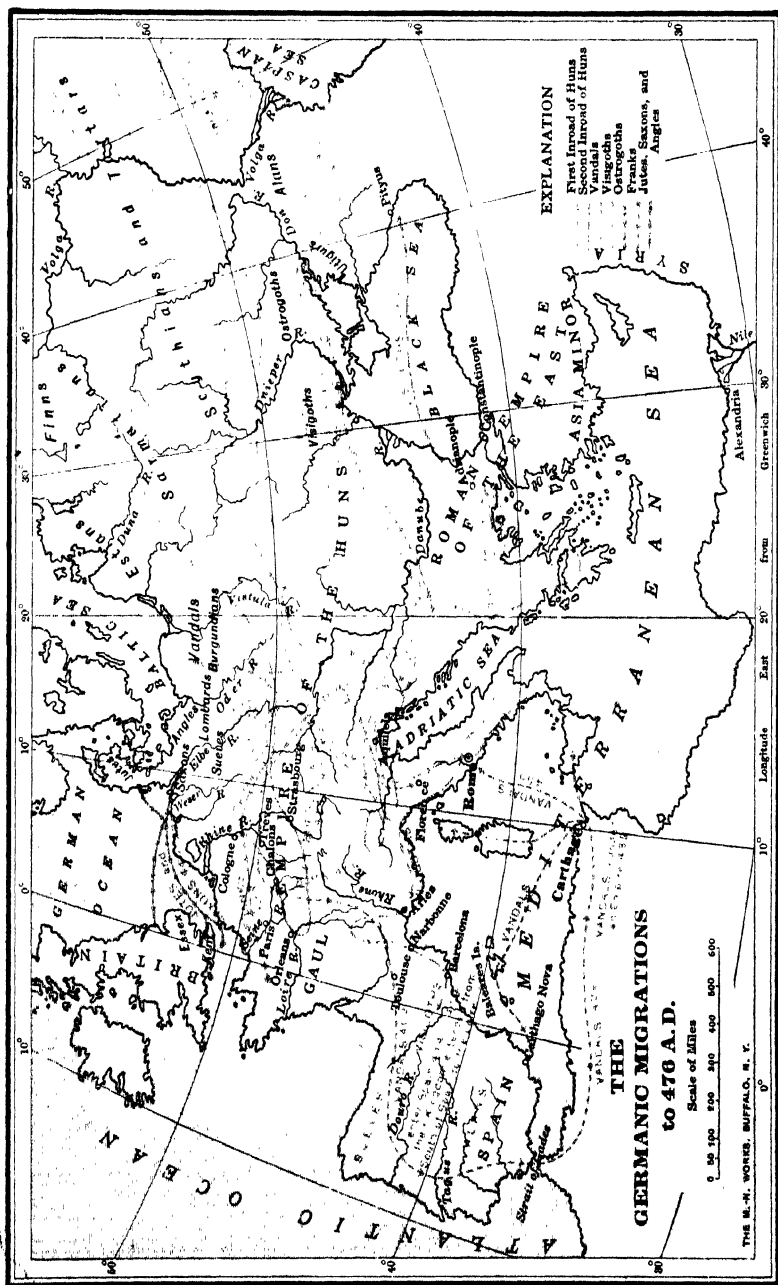
¹ The existing church was built by Justinian in the sixth century.

CHAPTER V

THE TRANSFORMATION OF EUROPE

WE have entered the fifth century after Christ. The Huns under Attila have worked their way along the north of the Danube and are swarming towards Gaul. Do you realize the danger in which Europe finds herself? She is in peril of becoming subject to Asiatic dominion. In his great drive across Europe Attila had stirred up the tribes in his path like a man knocking over a beehive. Nor was this all. The Vandals, who in time past migrated from North Germany, had taken to the sea, conquered Carthage, and turned pirate. Later on they sacked Rome, overran Spain, and entered into an alliance with Attila. Alaric, King of the Goths, who lived at the court at Constantinople, and profited by the learning he found there, learned among other things to despise the Empire, and now led his armies through Greece, destroying buildings of priceless beauty while he made for Rome. And Rome was obliged to ransom herself for 5000 pounds' weight of gold, 30,000 of silver, 4000 robes of silk, 3000 pieces of scarlet cloth, and 3000 pounds of pepper (which was worth ten shillings a pound in those days). Britain was left to civil war and invasion. Rome could spare troops no longer to protect this distant province from the assaults of Picts, Scots, Jutes, and Saxons.

In the middle of the century the Roman legions and their Teutonic allies joined issue with Attila. He had reached the river Seine. At Châlons they beat him. I think you ought to remember the date—451 A.D. Attila retreated, but if you look at the map you will see the extent of his empire. It was roughly from the Volga to the Rhine. All Central Europe north of the Danube had submitted to this Mongol ruffian. Even the southern point of Scandinavia acknowledged his overlordship. No one had ever conquered so far north before. He had invaded Northern Italy in his course, and Lombardy suffered greatly at his hands. A specially interesting thing happened during this Italian campaign. Some of the refugees from Padua went to live in the little islands off the north coast in the Adriatic, which were inhabited only by a few poor fisher-folk, and there they joined hardily in the labour of selling



From "Early European History," by Hutton Webster (D. C. Heath and Co.)

fish. The day was to come when the great commercial city of Venice was to rise among these lagoons. Italy was saved from Attila largely by the earnest intercession of Pope Leo I. The Mongol conqueror died in 453, soon after his marriage with the Burgundian princess Ildico.

Rome escaped Attila, but she was doomed nevertheless. In Italy there were bands of mercenaries—that is to say, hired soldiers, not of Roman nationality. They demanded excessive rewards for their services, and rebelled because these were denied them. Led by Odoacer, they attacked Pavia. It fell, and with it the Empire of the West. Odoacer reigned in Italy. He was succeeded by his murderer, Theodoric, King of the Ostrogoths, who built up a strong but barbaric monarchy on the ruins of the Rome of the Cæsars.

Then Western Europe lay under the shadow of the Dark Ages. Great tracts of Germany were vast, dim forests, and the only glory of the scattered tribes was war. Russia, so far as it was known, was given over to tent-dwellers to whom art and industry meant only the arts and toils of war. In Britain Roman occupation never did for the country what it did for Gaul, where the tribes who occupied it after the fall of the Western Empire managed to retain a certain amount of advantage from the civilization they found there. The thin veneer fell from Britain, and for many years she was like the remote island of pre-Roman times—given over to paganism and swept by invading hordes. Scandinavia was nursing pirate heroes yet to appear in their tall ships. At this time she did not even exist in the world of nations.

But events moved rapidly, and in order to understand how it all happened so rapidly one has to reconsider the term 'barbarian,' and the names Goth, Hun, and Vandal. The very names have come to denote ruthlessness. Such an impression is unjust in many ways. We cannot, as the Romans did, label all non-Roman nations as barbarous. The tribes were as varied among themselves as the nations are now. Some of them were to prove very readily that they were not only intelligent and adaptable, but had reached a standard when they were bound to come into competition with the leading power. The Hun perhaps merited his reputation most, and in consequence he gradually disappeared from Europe after the death of Attila, when the Central European tribes reasserted their independence. The worst crime of the Vandals was that

they did what they set out to do, which was to conquer and to destroy. They speedily lost the fruits of victory because they had not genius enough to profit by the opportunities of the civilization they usurped. They learned Roman vices without learning Roman virtues. The Goths do not deserve their bad name at all. Posterity has never forgiven that section of the nation which left Greece in ruins; but they did no more



From "Ancient Civilization," by Hutton Webster (D. C. Heath and Co.)

damage than the armed forces in the field during the Great War of 1914-18.

Theodoric, the leader of the Ostrogoths, had already adopted the Christian faith when he overthrew Odoacer. The Christian court of Alaric, the Visigoth, and the court of his successors at Toulouse, were examples of seemly living to their neighbours. Even the Vandals embraced Christianity. It made no appreciable difference to their public morals, and history shows little sign that Christian ideals were allowed to restrict the actions of any ruler.

The nations who fell out of the race and disappeared from the map were those who lacked the constructive genius to keep a foothold and develop. A nation must either go on or go out. Conquest must be consolidated by statesmanship.

"What," you may ask, "has all this got to do with geo-

graphy?" Quite a lot. It explains how so much of the scientific knowledge laboriously acquired by intellectual people like the Greeks and practical people like the Romans was almost blotted out between the fifth and the eleventh centuries: it explains the curious mixture of races in Europe, and the appearance of various racial types in unexpected places.

It must not be imagined that art and commerce were absolutely at a standstill during this period. The Byzantine court was one of dazzling magnificence, and seafarers brought gold and spices, amber and ivory and pearls, to add to its glories. Charlemagne, the Emperor of the Franks, also loved splendour, and encouraged learning and became the patron of learned men.

This royal love of gorgeous outward trappings had an important influence upon commercial geography in the reign of Justinian. The first and most famous commodity which the ancient world obtained from the Chinese Empire was silk, called by the Chinese themselves *sze*. When one knows this it is clear why the Greeks should have dubbed the silk-making nation the Seres—the Sze-res. And from that Greek word come all these European equivalents, the English *silk*, the French *soie*, the German *seide*, the Spanish *seda*, the Italian *seta*. According to tradition, the art of weaving into a beautiful fabric the delicate floss spun by the silkworms was introduced into China by Se-ling-she, the wife of the Emperor Shin-Nung, 2737–2697 B.C.

Justinian, the humbly born but very able Byzantine Emperor, was anxious to obtain from the land of the 'Seres' the actual insects from which silk was derived. Persia was in a sense a bridge between the Near and the Far East, and he bribed two Persian monks to smuggle some silkworms from China. They managed to do so in their hollow staves of bamboo.

Thus China lost an age-long monopoly and Europe acquired a new industry; and thus Persia's importance as a clearing-house for trade with the Chinese Empire was diminished. It is amusing to realize that Justinian thought it was the seed of a plant, not the cocoons of an insect, which his messengers were to bring to him. The Roman poet Virgil believed that silk grew on trees.

It is time we glanced again at the progress of China, for Europe was beginning to feel her way towards closer contact with this Eastern people. China was a great country in those

days. Ceylon was her vassal, and her trading junks were supreme in Far Eastern waters. There have been stories of her going much farther afield, even to Africa, but they have never been substantiated. Still, if you go to Africa and look at the Hottentot, with his yellow face so much paler than the faces of the finer natives, high cheek-bones, and small eyes, you will wonder whether the story is not true after all. The Chinese sailors may have done as the Phœnicians did. Those hardy seafarers used to sail round Africa, and to keep themselves in provisions would lay up their ships, sow a crop, and wait to reap it—quite long enough to intermingle their blood with the natives of the country. Again, the Chinese themselves had a story of a voyage to a country they called Fusang. It took place in the fifth century A.D. They sailed across the Pacific, and the description of Fusang tallies with what might well have been Mexico. These things cannot now be proved, but there is no doubt that the Chinese in those days were far from being the exclusive, homebound people they afterwards became.

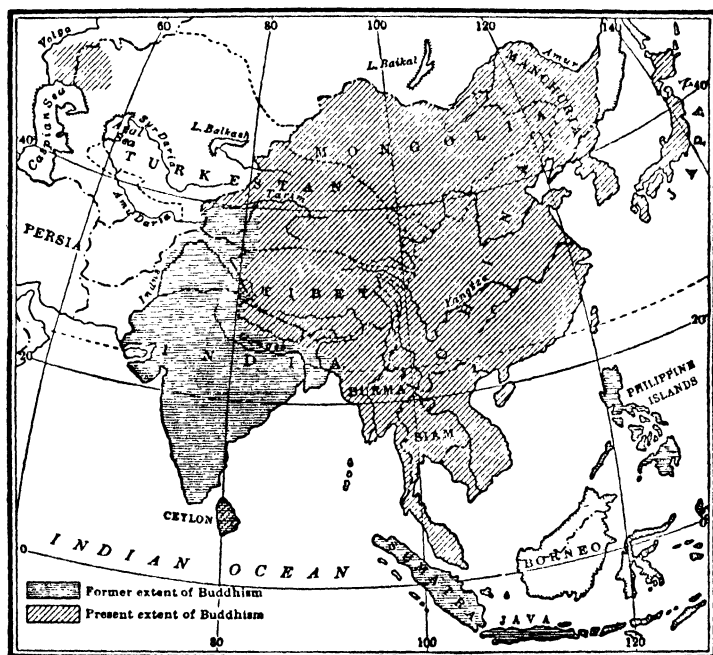
The art of China had for centuries been exquisite. She had been casting in bronze almost as soon as Tyre and Sidon. Her pottery, in an entirely different style, was equal to the pottery of the Mediterranean. She had written poetry for over a thousand years, and now she was showing a fresh burst of poetical inspiration.

There was no slavery in China. Among the interesting odds and ends of information that have come down to us about her we hear that she invented gunpowder in the sixth century, and had a system of identification by finger-prints. She already used the compass with the magnetic needle, a secret which Arab seamen were later to learn from her and—very much later—to impart to the more backward mariners of the West.

China had her religious searchings as well as Europe. Buddhism, adopted of old time out of India, and Taoism, a native product, were partially ousted by Confucianism. Indian missionaries had brought to the Chinese people the gentle religion of Buddha in its earlier and purer form, before idolatry and superstition distorted it. Soon Chinese pilgrims were daring the long, laborious, and perilous trek to India to venerate the scenes of Buddha's life, teaching, and death, and to collect manuscripts of the Buddhist scriptures.

It was in the year 453 of our era that Buddhism became—what it did not remain—the official religion of China. About

two hundred years later a learned and devout Chinaman called Hsuan-tsang crossed the thirsty wastes of the Gobi Desert and proceeded, by way of Tashkent, Samarkand, Balkh, the Hindu Kush, and the valley of the Panjshir, to descend through the Khyber Pass to the vast plain-lands of India. Hsuan left a careful record of his journey—a journey that seems marvellous



EXPANSION OF BUDDHISM

From "History of Mankind," by Hutton Webster (D. C. Heath and Co.)

even to-day when we try to follow his track upon the map. He had many exciting adventures by the way, was attacked by robbers and would-be assassins, and lost several of his baggage elephants in the gorge of the Tangitar. On his return to his monastery—for Hsuan was a monk—he was received with much ceremony, and the relics and manuscripts he had collected were placed among its treasures.

Towards the middle of the sixth century a certain merchant was going backward and forward on the eastern route. He came from Alexandria, and knew the Red Sea route to Ceylon,

the Gulf of Persia, the harbour of Socotra, and the native traders of Abyssinia. We know him by his pen-name—Cosmas. He was a devout Christian, and he turned monk and wrote a book. He was anxious to bring geographical ideas into sympathy with the texts of Scripture. Such phrases as “the four corners of the earth” and Jerusalem “set in the midst of the



THE HEREFORD MAP, A.D. 1280

Notice that Jerusalem is placed in the exact centre of the world.

nations and countries” were to his mind statements of scientific fact, and on the strength of his lucubrations he denied the earth was a globe. He drew a rectangular map. It is not reproduced here for you because it is so confused you would make nothing of it. As late as the year 1280 monkish geographers were still making Jerusalem the exact centre of the world.

The work of Cosmas was the first essay in Christian geography, and the beginning of a long series of efforts on the part of the Church. The hard-won scientific knowledge of the Greeks and Romans had in the course of time to be learned all over again by the Christian world. Even two centuries later, when an intrepid bishop of Salzburg confessed that he thought

the world might possibly be spherical, he was promptly suppressed by the Pope. If it had not been for the more enlightened among the Arabs, whose prophet Mohammed bade them "seek knowledge even in China," and who enthusiastically preserved and studied the works of Ptolemy and Aristotle, Europe would have been longer in recovering the results of past research. All the Arabs were not equally enlightened. The burning of the great library at Alexandria must be remembered, as well as the building of the mosque at Cordova.

You must not think that Christianity retarded the advance of culture in Europe. In the long run the opposite is the truth, and, though to discuss the doings of the Church now will take us past the period with which we are at present dealing, I am going to tell you something about it in this chapter. We shall be preoccupied later with the primary movers in the expansion of Europe, to whom the Church came second, and we shall be able to pause but rarely to explain when and where the secondary influence came in; and yet to leave that influence unremarked would do less than justice to our subject, and the Crusades, which we shall deal with in due course, certainly exercised a direct influence upon communications and commerce.

Much of the wealth and power of the medieval Church arose out of the establishment of monasteries. The monastic system was already in being in the Dark Ages. The idea was older than Christianity, and was revived by certain ardent Christians of the fourth century, who lived as hermits in the Libyan Desert. One of the earliest and most famous of these recluses was St Anthony; but he was not allowed to remain a recluse, for disciples soon gathered round him.

Another devotee, a Syrian peasant named Simeon, built a pillar near Antioch, and lived and died on the top of it. Even from India the wondering pilgrims came to receive the evidence of their own eyes. This was the fakir spirit, which may be seen in India to-day.

Soon the movement took a new turn. An Egyptian, Pachomius, established a community of ascetics. He chose the hitherto uninhabited island of Tabenna, in the Nile, near Thebes, and he and fourteen hundred brethren built the first monastery. The Church was again dubious about the value of such communities, but it became reconciled, and the idea spread rapidly. Pachomius himself founded nine monasteries and a convent. The Pope welcomed his efforts. The Bishop

CHAPTER VI

THE CRESCENT ABOVE THE HORIZON

EARLY in the seventh century several Eastern monarchs received with mingled amazement and indignation certain peremptory letters written in Arabic from the town of Medina, in Arabia. The writer of these letters addressed the rulers of the earth, and called them to worship the One God and to recognize Mohammed as his prophet.

Some of the monarchs whom Mohammed addressed paid no attention to him: they probably thought that he was mad. But the Emperor of China was very polite. The Chinese always are, and in any case they were far more civilized in those days than anybody else, and could afford to be large-minded. The disciples of Mohammed were welcomed in China on equal terms with the members of any other respectable creed which aided men in the conduct of their daily lives. In due course Mohammed's people built a mosque there which still exists, and is the oldest in the world. But in the Western world rose a fierce antagonism. Mohammed pressed his invitation at the point of the sword. The rulers of the earth should either recognize his doctrine or pay for their refusal with their crowns.

Who was Mohammed? He came of a peasant family, and was at one time a camel-driver, but he improved his station by marrying the widow of a rich merchant, his late employer. He lived in Mecca. Mecca was important partly because it enshrined a black meteoritic stone which the Arabs regarded as sacred, and to which they made pilgrimages, and partly because it was a trading station. Up the Red Sea from Abyssinia and thereabouts came the merchandise of Africa to Jeddah, the port of Mecca. From there the caravan transport carried it across Arabia to a port on the Persian Gulf. There it was unloaded again and reloaded upon rafts, and, in company with the pearls from the Gulf fisheries and the aromatic merchandise of Arabia itself, it travelled to the mouth of the Euphrates, and found its way up the river into the commercial centre of that day. It met the caravan routes at different points, and was eventually distributed to the great markets of Bagdad and Damascus and the rest. So the little desert town was a busy place.

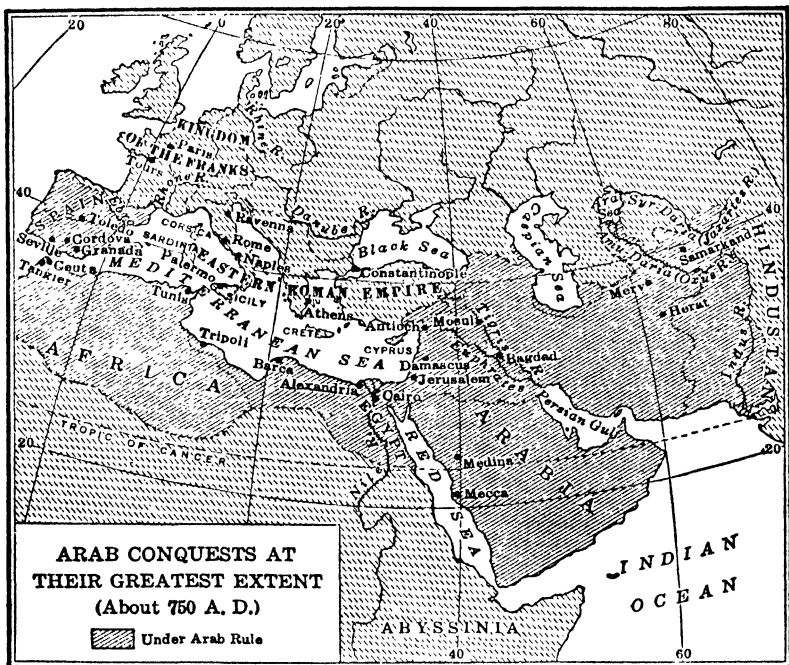
Mohammed was middle-aged before he was ready to impart his spiritual discovery to the world. Mecca was not pleased; but Mecca was sanctuary. No one might be put out of the way there in the swift and simple fashion in which in old times they usually dealt with tiresome people. Things came to such a pass, though, that Mecca decided temporarily to suspend this inconvenient restriction, and Mohammed, warned in time, fled. He fled through the desert to Medina, some distance away. Medina was impressed and hospitable. For some time Mecca and Medina fought out their disagreement, and Medina won. They made a treaty of peace, and Mecca stipulated that the pilgrims of the new faith should make Mecca their goal.

Mohammed entered Mecca as its lord. That was in A.D. 629, a year after the letter-writing. Three years later he died, with all the tribes of Arabia at his feet. His followers set about avenging themselves upon the more distinguished rulers of the earth. The Persian Empire was torn by discord after violent events which ended in parricide, and by the time the century was middle-aged the Arabs had taken possession. Syria went the same way. So did Egypt, and a large slice of the north coast of Africa. By the middle of the next century the rest of the North African province had gone; Spain had gone; and eastward the Arab troops had conquered to the Punjab, and across the Oxus to the Sea of Aral.

Constantinople, happy in one of her able emperors, had held her own, but in spite of this the Eastern Roman Empire (let us call it the Byzantine Empire, for that is now its proper name) had suffered a paring down from which it never recovered. In the coming centuries it will be reduced more and more, till hardly anything but the core, Constantinople, is left, and the Turks will come along and swallow that. It survives for the moment, however.

The next few centuries are so full of new interest that one hardly knows what to tell you about first. From the eighth to the twelfth century Arab learning, Arab art and crafts, Arab trading, Arab travellers dominated civilization. Some conquerors preserved, others destroyed, the relics of earlier, non-Arab civilization. Territorially their advance was stayed in the east of Europe by the Byzantine Emperors, and in the west by the Franks, who under a new dynasty were steadily advancing to a position of first importance. Towards the end of the

eighth century Charlemagne brought the Frank power to its highest point, and he continued to hold the Saracen at bay. You must read *The Song of Roland*, the French saga which tells the story of Charlemagne's campaigns in Spain, and of the heroic friendship of his knights Roland and Oliver, who died in his service in the Pass of Roncesvalles.



From "Ancient Civilization," by Hutton Webster (D. C. Heath and Co.)

It was Charlemagne who in the process of extending his empire crushed the pagan Saxons in North Germany and beheaded them by the thousand until the remainder consented to become Christians. His empire extended to the Elbe and into Italy. It was Charlemagne who, in order to control his vast conquests, established the chivalric system. His paladins were the counterpart of Arthur's fabled knights. In 786 came Haroun-al-Raschid as Caliph¹ to Baghdad. It seems almost too good to be true that the Caliph of the *Arabian Nights' Entertainments* actually existed, though the final form of the book came

¹ This title is really the Arabic word *Khalifah*, 'successor.'

later and included stories, especially those of Sindbad the Sailor, based on events which took place after Haroun-al-Raschid's day.

Charlemagne and Haroun-al-Raschid never met, but they had a pleasant little intercourse by envoy. They exchanged presents. Haroun-al-Raschid sent Charlemagne a diversity of gifts—a water-clock, a tent, an elephant, some chessmen, and the keys of the Holy Sepulchre. Charlemagne employed a Jew as his messenger. It was so difficult to find men of the world in those days that, in spite of a certain amount of prejudice and persecution, the clever and cosmopolitan Jews held office.

Jews were employed by Moslem and Christian alike. In the following century we read of a Moslem ruler who sent a Jew to India to investigate some promising astronomical material. Jews excelled as physicians. If you remember our early chapters you will realize that they were of the same original stock (Semitic) as the immediate followers of Mohammed, who for four centuries were the guardians of learning. Jews and Mohammedans lived peaceably side by side in many centres of Islamic culture.

The extreme bitterness between Christian and infidel did not exist in practical politics at this time. The Christians in Jerusalem were not insulted by the Arabs. It was from the 'heretical' Nestorian Christian missionaries that the Arabs garnered some knowledge of Greek and Roman science and philosophy. As early as the fifth century some of the classics had been translated into Syriac. Nestorians had undertaken the study of medicine, and had preserved what medical knowledge the world possessed.

Haroun-al-Raschid had an open mind. He engaged a Nestorian tutor for his children, and leading families among the Moslems, setting aside their natural prejudices, followed his example. The friendliness between Haroun-al-Raschid and Charlemagne was partly an intellectual link. Charlemagne followed up his conquests in Europe by a serious endeavour to embrace learning. He imported from England a famous scholar, Alcuin, and put him in charge of the court schools. He took a lively interest in geography, and had a silver table-top engraved with a map of the world. A map of Rome decorated another silver table-top, and Constantinople was engraved upon a gold one.

The Arabs were conservative at sea. They believed in all the hair-raising superstitions of boiling water on the equator and the danger of toppling over the edge of the world into nothingness if you sailed too far; and they confined their ships to the well-known ocean tracts of the East, braving only the pirates of Socotra and Malabar, which were a legacy to them of former days. To westward they made no effort to bridge the gap between Carthage under Roman domination and their own time—a gap not bridged until shortly before Prince Henry of Portugal (Prince Henry the Navigator) initiated the burst of enthusiasm which culminated in the discovery, or rediscovery, of Southern Africa. But they excelled in land travel, and where they travelled they traded. Arab coins have been found as far north as Scandinavia and as far east as China. Early in the eighth century they controlled the trade of the Black Sea and of the south coast of the Caspian. They opened up great tracts of Russia for the first time. They met in the Caspian district a section of the coming nation, the Tartars. These people were of the great Central Asian stock to which you have already been introduced, and after entangling themselves in the history of China had now worked their way westward. They had spread as far as the river Don. They commanded the mouth of the river Volga, a strategic point for trade. A number of outcast Jews from the Eastern Empire had mingled with them, and already the Great Powers had employed them as auxiliaries, for both Constantinople and Persia made use of them in the wars of Justinian's time.

A great fair used to be held on the banks of the Volga, and down the river came the merchandise of Russia, furs and skins, wax and honey, and was met by the Arab traders. These Russian folk called themselves Khazars. In the eighth century their king abandoned his heathen gods, and embraced the Jewish faith as the religion allowed to be second best by both Christian and Moslem, and therefore a happy mean. But in trade all creeds were alike to him. Mohammedan missionaries later made many converts among these people.

During the ninth century the Arabs were in close touch with China. They used the old overland routes to the East, but used them more. In 840 an explorer was sent into Central Asia, and in 890 another explorer furnished a description of the trade routes of Russia, of Persia, and of those from Balkh to China. Hundreds of Moslem traders held Chinese passports,

and colonies of Moslems settled in that country. The Arab ships sailed for the port of Hong-Kong by way of a long and prosperous line of linked trading ports, and ships from China rode the river harbour of Bagdad. Arab markets flourished in the Malay Peninsula, and the principal ruler of the Malabar coast of India became a Moslem. Mohammedan armies also invaded India on successive occasions from the seventh century onward, and eventually overcame many of the native princes and established Arab rule over a large part of the country. In the ninth century there were as many as ten thousand Moslem colonists in Bombay alone.

The stories of Sindbad the Sailor belong to this time. They sound extravagant nonsense, but actually in the descriptive part of the narrative many instances of geographical truth are discovered. A scholar has told us that Sindbad the Sailor is the story of "Arab adventures at sea during the ninth and tenth centuries, put into romantic setting and ascribed to one man." Sindbad himself is the embodiment of a real merchant named Solyman. Solyman even sailed "the Sea of Pitchy Darkness," on the other side of China. The island where he found the roc's egg was Madagascar, and there is no reason to disbelieve that he found a very big egg, even if the size did swell to the dimensions of the proverbial fisherman's catch. With that fantastic bird the ostrich still at large, I personally am prepared to believe anything.

During the eighth century the Arabs founded trading colonies on the east coast of Africa. The movement came about in the first instance by accident. It was the result of a family feud. A family called Emosaid, descended from Mohammed's daughter, endeavoured to make the chief of their clan Caliph at Damascus. The plot was defeated, and the Emosaid fled in a body down the Red Sea. They supported themselves by trading, and gradually founded colony after colony of trading towns in Socotra and down the east coast of Africa, until Malindi, Mombasa, and Mozambique, all with trade connexions on the opposite Indian coasts, had built up a lasting monument to Arabian trading enterprise.

While the traders were ranging abroad the scholars were studying at home. A fine library accumulated at Bagdad, and two observatories, one at Damascus and one at Bagdad, bore testimony to the lively interest taken in astronomy and in the laws of the universe generally. The Arabs in Spain soon made

themselves independent of Bagdad, and there, too, especially at Cordova, a school of learning developed. In the Mediterranean Moslem colonies arose in the islands, and in the south of Italy and France. But a new development prevented too sweeping an influence there. In Venice and Amalfi we see the beginnings of the great maritime cities of later days. For services rendered in subduing pirates, in exercising some control over sea-going disturbances generally, and in aiding Constantinople against rebel Italian towns still under Byzantine jurisdiction, Christian monarchs rewarded these cities with certain valuable trading privileges. These amounted to making them nearly the independent city-states which they afterwards became, and set an example to other ambitious cities, who in turn claimed the same rewards. The cities' restraint upon the Moslem, though, did not prevent a certain amount of clandestine trading with him which endangered the *entente cordiale* between themselves and Constantinople, but it was never entirely suppressed, even in crusading days.

By the latter half of the ninth century Islam had lost the first fresh and lusty fervour of the thrust inspired by Mohammed, and she began to decline. Europe was to go steadily forward. Then came the rise of the maritime city-states of the



MOSAIC OF THE TRICLINIUM OF POPE LEO III
IN THE CHURCH OF ST JOHN LATERAN
IN ROME

Leo III and the Emperor Charlemagne are shown at the feet of St Peter, who gives the apostolic keys to the Pope and a banner to the Emperor.

Mediterranean, and the growing power of northern towns, maritime and inland; the Crusades, and their effect upon trade in the West; the disruption of Charlemagne's empire, the rise of the French monarchy, and the emergence of Germany with an emperor of her own.

After the death of Charlemagne and of his son his empire split into three—the beginning of the geographical division which eventually resolved itself into France, Germany, and the Netherlands. One grandson inherited the eastern portion of the empire, the nucleus of Germany; another received the west, Francia; and Lothair, the eldest, a strip in the middle, designed to contain the two capitals, Rome and Aachen. The northern part of his domain was called after him, Lotharingia, a name in which Lorraine finds its origin. The possession of this middle kingdom was a bone of contention between France and Germany ever after the death of Lothair, and a portion of it is still.

The title of Emperor of the Holy Roman Empire had been bestowed by Pope Leo III upon Charlemagne in return for Charlemagne's having rescued him from his enemies. The Pope crowned him on Christmas Day in the year 800. The Papacy subsequently bestowed the title upon other rulers who espoused its cause. In the course of time it became the inheritance of the princes elected as Kings of Germany. It survived until 1806, when after the Napoleonic wars it was swept away.

CHAPTER VII

THE SEA-KINGS

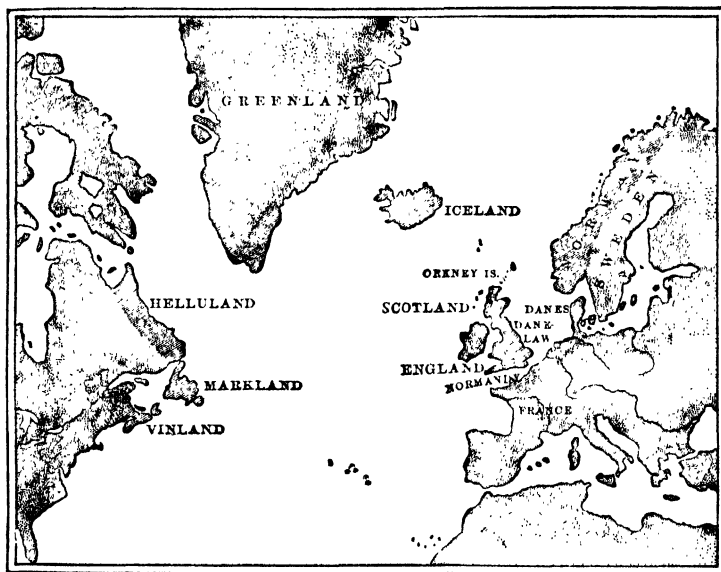
AT the end of the eighth century, when Charlemagne was pursuing his conquering path, a new danger loomed up in the north. Men on the coasts of England, Ireland, and France learned to dread the appearance on the skyline of high-prowed black ships manned by Vikings. From Denmark, Norway, and Sweden men of magnificent physique, any amount of courage, and an enterprising spirit, whose way of life you may study in their old sagas, were pouring forth a succession of expeditions bent on piracy and colonization.

Britain had been slowly absorbing the Angles and Saxons, so that by this time they dominated the country, which had taken their name and was now called Angle-land. In the latter half of the ninth century her able king Alfred was dealing with the Danes, who were so determined to settle in Angle-land that they brought their wives and children with them. Alfred, one of the greatest kings who ever ruled in England, was a scholar as well as a soldier and a sailor. He had been sent on a visit to Rome as a child, and was trained in the meagre book-learning of his time. England, as we must henceforth call her, had forgotten nearly all the Latin she ever knew, and he translated various works which he believed would be of service to his people. Among them was a universal history, written by a Spanish churchman named Orosius, and while translating it he enlarged it. Through the presence at his court of two intelligent Norsemen, Wulfstan the Dane and Othere the Norwegian, who had travelled a certain amount, he gained information about Germany, the Baltic lands, and north-east Russia. Alfred is even credited with having sent an expedition to the White Sea. He succeeded in stemming the tide of Danish invasion, though a large part of eastern England fell under Danish rulers and colonists, destined, however, eventually to be absorbed into the kingdom.

Francia suffered severely at the hands of the Norsemen. As early as the eight-forties they had attacked Rouen and Bordeaux and even Paris. They sailed up the rivers, burning and slaying and demanding ransom. The Franks, weakened by

the domestic quarrels which arose after the division of Charlemagne's empire, were obliged early in the tenth century to allow the Northmen to settle in the north of France, lest worse befell, and the dukedom of Normandy came into being.

Irish monks had discovered Iceland about 795, and a Norse colonist from the Faroe Isles was blown there by storm about half a century later, and called it Snowland. A little while



DISCOVERIES OF THE NORTHMEN IN THE WEST

From "*Early European History*," by Hutton Webster (D. C. Heath and Co.)

afterwards a Norse fleet wintered there, and grimly renamed it Iceland. From 874 Norse colonization began upon the island, and eventually it built up a very interesting civilization. Perhaps you will remember how in 1930 Iceland celebrated the thousandth anniversary of her Parliament. In 877 the Norsemen Gunnbiorn sighted the coast of Greenland, and in 982 Eric the Red sailed from Iceland and founded a colony there. In the first years of the next century more than one expedition sailed from Greenland down the east coast of North America. Nothing came of this, except the sagas of their splendid navigators (read the *Wineland Saga* some day). In the Vatican, in Rome, an account of their doings still lay hid-

den when Columbus was making his plans. This shows you how tardily news spread in those days. In later days when the story of these expeditions came to light people disbelieved it, but to-day scholars have established the Northman's claim to being the first navigators in history to reach America. The pioneer of these expeditions earned the name of Leif the Lucky. It is an instance of discovery unrecorded by the geographers of the time, not followed up by others, and so lost again.

We can imagine how often this happened before the use of the compass, accurate charts, and printing. We talk of the great discoverers of a later age, but what we often mean is that the time of organized exploration on a grand scale had arrived. These voyages are deliberately planned, with a definite goal in view, and their results will become, if not general knowledge at once, at least the subject of careful record in national archives. But before this time many lands had been visited by isolated bodies of men whose knowledge either died with them or became so involved in magical additions as the story passed from mouth to mouth that its truth was unrecognizable.

By the middle of the ninth century (862) the Norsemen, led by Rurik and travelling by way of their own Baltic waters, landed in Russia and made Novgorod their capital city there. They were invited to settle by a section of the people who recognized that their superior mentality would benefit the country; and by the power of the sword they obtained their supremacy over the rest, and over yet more primitive people farther inland. In the course of time they worked their way south to Moscow, and by intermarriage and interchange of language established the kingdom of Russia. Through them Europe obtained for the first time some clear knowledge of northern lands and waterways. The old inhabitants of Novgorod and its district called the Northmen the Varangians, and as Varangians we find Northmen (with Englishmen among them) employed in the service of the Byzantine Emperor. Fresh troops from Scandinavia were no longer required by the Russian rulers; they had become rather a menace than a help, and they were advised to apply to the Emperor for employment. They became his bodyguard and served him right royally.

Trading intercourse between Russia and Constantinople

grew. In the beginning the Northmen had sent their trading ships down the rivers from Novgorod, transferring freights from one river to another and round the falls, as the fur-traders in North America did long after. They got into the Dnieper, and by it into the Black Sea. Or they used the Don to reach the Sea of Azov, and so across to Constantinople. They brought slaves, honey, wax, and hydromel (a beverage made from honey), and carried back corn and wine and the spices which reached Constantinople from the east, and strange and beautiful articles manufactured in Greece. They reached the Caspian, too, by way of the Volga, and met the traders there.

Russian merchants were soon settled in Constantinople and in the provinces. With intercourse came the revelation to the Norsemen of Constantinople's wealth. The Emperor increased their knowledge of the Mediterranean world by employing them as mercenaries against his enemies. Greed grew with knowledge, and they ended by attacking Constantinople. By 988 they felt important enough to demand a princess from Constantinople for their sovereign Vladimir as royal consort; and the Emperor granted the demand on condition that Vladimir adopted the Christian faith. Greek missionaries slowly weaned them from their human sacrifices and savage gods. They appreciated the benefits of law and order, and employed Greek teachers to train their people, and Greek artists and architects to embellish their settlements. The time came when they even put up some claim to the Imperial succession.

Other roving bands of Norsemen from the homeland found their way into the Mediterranean, and coast towns suffered from their attentions. But a new element had arrived in the North. Christianity was penetrating there. Missionaries were moving among the people. The Danes were learning from Christian England, and English missionaries helped in the good work on the Continent. Christianity found in the Norsemen a naturally devout temperament. Henry the Fowler and his son, Otto I (Otto the Great), whom for services rendered the Pope crowned Emperor of the Holy Roman Empire, were in turn able kings in Germany in the tenth century. Henry occupied and converted Southern Denmark. Incidentally, they increased the borders of Germany beyond the Elbe, and in the south subdued the wild Magyars, who ceased their raids, accepted Christianity, and settled down in the middle Danube

lands, which, extended and materially aided by the merchant traffic along the river, ultimately became Austria and Hungary.

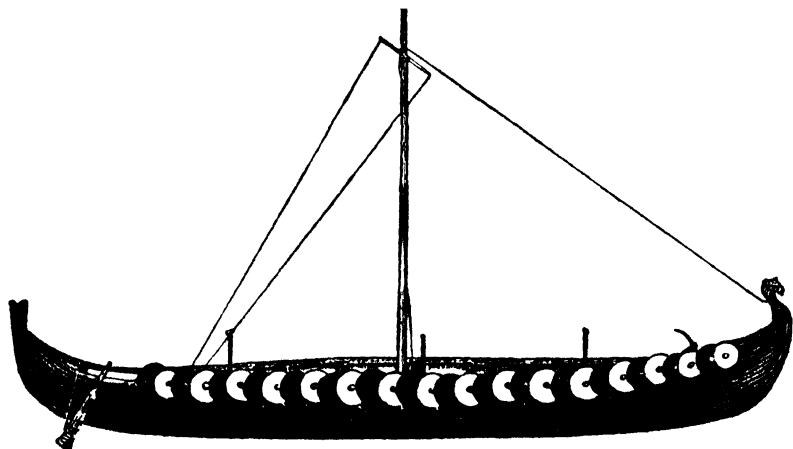
In 1017 Canute the Dane, King of Denmark, Norway, and south-west Sweden, became King of England, and under his dominion Christianity became general in Scandinavia and greatly forwarded civilization. He also visited the people on the eastern shores of the Baltic, and compelled some of them to accept Christianity. This great Scandinavian empire broke up at his death in 1035. But the union had served its purpose.

The Norsemen were soon making pilgrimages to the Holy Land. In 1016 a band of forty of them, homeward bound, rescued the city of Salerno, on the south-west coast of Italy, from the Saracens. The Lombard prince of the city invited them, and some Norman knights as well, to his court. The Byzantine Emperor employed some of these in action against the Saracen in Sicily, and omitted to reward them suitably, which sowed seeds of friction. Italy, by the way, was in sad case in those days. The citizens of Rome and the Pope were always at loggerheads; and the King of Italy, which meant the King of Northern Italy (the Byzantine Empire and the Lombards shared the south), quarrelled with the Pope. The Pope invited Otto I to the rescue. To invite Germans on to Italian soil, and to put the Papacy under an obligation to them, set up a train of troubles between Germany and Italy which lasted for a couple of centuries.

In 1046 Robert Guiscard, the son of Tancred, the greatest Norman next to William the Conqueror, arrived in Italy for the ostensible purpose of helping her against the Saracen. His operations made Italy aware that his help was a menace. Six years later Lombards, Papacy, and Greeks combined against him. He beat them and took the Pope prisoner. The Norman knight was a Christian and a gentleman, and, we may conclude, a diplomat. He treated the Pope well and made generous terms. The Pope rewarded him by giving him the duchy of Apulia and Calabria as a feudal possession under the Papacy, and by offering him Sicily as well if he could take it from the Saracen. This he accomplished in 1062. By this time the Papacy and the Emperor of the Holy Roman Empire were quarrelling about who had the right to nominate the Popes. Guiscard came to the rescue and beat the Emperor out of Italy. But the Norman soldiers sacked Rome as heartily as any Hun, and the Pope died in exile at Salerno.

Italy was to be the cockpit of monarchical and Papal struggles for long centuries to come—long after the Norseman had gone his way. The result was a disunited Italy, brilliant in scholarship, abounding in municipal wealth—that is to say, in the power of great cities—but as a national unit a power only in modern times.

While Guiscard has been establishing the Norseman in Italy and Sicily, his countryman, William the Conqueror, has



RECONSTRUCTED MODEL OF THE GOKSTAD SHIP
South Kensington Museum

usurped the English throne, and we reach the date 1066, which English people are generally agreed is the only one they remember; not so much because William and his dynasty had an overpowering influence upon English affairs as because it is an old custom for us to start with William the Conqueror when we set out to learn the list of English kings.

Sometimes the actual ships of these sea-kings are unearthed in Scandinavian countries. This is owing to the fact that a warrior was often buried in his ship, with all his warlike gear around him: or his wife might be buried in a ship with her jewels and her weaving implements. One of these ancient vessels found at Gokstad dates from somewhere about the beginning of the tenth century. She is double-ended—that means prow and stern are the same shape and height; clinker-built—I told you what that meant in the Roman chapter; and capable of attaining a speed approaching ten knots. Her

dimensions are: length, 78 feet; breadth, 16 feet 9 inches; depth amidships, 6 feet 9 inches.

We have seen the Norseman impregnating Europe on all sides with his influence. We must now turn to another movement and another people. Christendom is being seriously threatened once again by people of the inexhaustible stock of Central Asia, and Europe is to turn Crusader.

CHAPTER VIII

THE CRUSADERS

I MIGHT have told you earlier that, according to one theory, the world should have come to an end in A.D. 1000. A good many people were so firm in the belief that they ceased to build or to plant their fields. It seemed a good tidy date to round off with, but, as doubtless you already realize, the world did not come to an end. We must brace ourselves to inquire into the next thousand years, the beginning of which we found making a hearty start in the last chapter and at the end of which we find our modern world.

It was in the last years of the first century of this next thousand years (1096) that the first Crusaders set out. How did it come about?

You all know something about the Turks, but you probably believe, as I believed till I grew up, that they came from Turkey. As a matter of fact, Turkey was their final resting-place, not their first. They originated in Central Asia. They were the lords of their own great plains and the assailants of China before they emigrated to south-west Asia and Europe.

Long ago Justinian had sent envoys to their fastnesses in Mount Altai (the Golden Mountain) when his contest with Persia rendered it advisable for him to make friends with a power strong enough to make itself felt should it decide to aid and abet his enemies. Now here they were—their original home far behind them and no longer regarded; and their nation already divided up into various branches, each branch strong and ambitious, and developing new provinces. During the last century some of them had swept into the territories of the Danube. The Danube had long been the route by which intrusions of Asiatic origin had found their way into Europe. In the eighth century the Slavonians had come that way, and many of them had settled in Greece. In the ninth century another horde, the Bulgarians, got as far as Corinth, and in the beginning of the eleventh century had become so threatening that the Emperor Basil, "slayer of the Bulgarians," drove them out, or such of them as were actively a nuisance. The

Hungarians (Magyars they called themselves) were yet a third swarm who used this convenient highway. When the Turks came they overpowered the Slavs and Bulgars.

Other Turks settled between the Caspian and the Black Seas, and, moving among the Khazars, engaged the attention of



EUROPE ABOUT THE END OF THE TENTH CENTURY

The Fatimids, who ruled over part of North Africa were a dynasty of Arabian caliphs who held that they were descended from a daughter of Mohammed.

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

Mohammedan missionaries, travellers, and traders. The Seljuk Turks, so called after their leader, who founded their dynasty in the district south of the Caspian, were the ones who fired the powder magazine which roused all Europe. At this time (A.D. 1000) a Turkish prince, Mahmud, ruled in the eastern provinces of Persia. The Hindus paid him tribute, for he had conquered far down the Upper Ganges. Mahmud applied to his kinsmen the Seljuk Turks for mercenaries, and was astonished and not a little alarmed at the number of men

they could put into the field. His alarm was not unfounded. Before very long the mercenaries were masters, and had expelled the Mahmud dynasty. They did not expel, however, the graces of Persian and Arab civilization, and permitted Persians and Arabs to hold offices of State. They became wholehearted Mohammedans, and the Caliphate at Bagdad offered them in reward for raising the Crescent in battle whatever Christian territory they could conquer on the borders of the Asiatic Mohammedan empire. By the middle of the century they were masters of the Caliphate itself, but worse was to come. Before the end of the century they fought the Byzantine Emperor, and, except for a narrow strip of coast, conquered his dominions in Asia Minor. Captive Greeks were made to build a navy for the Turks, and Constantinople trembled for her safety. The Emperor implored the rulers of Western Europe to bestir themselves. Then Jerusalem fell. The Turk, however, allowed the Patriarch of the Christian Church and the Christian community to pay a nominal tribute and retain possession of their church and the Holy Sepulchre.

Hundreds of pilgrims, moved by the catastrophe, set sail for the Holy City. The Franks and Normans were specially zealous. The city of Amalfi grew important through the transport by sea of such of these devout travellers as did not go overland through Hungary and *via* Constantinople. She made the most of her time, too, in establishing trade connexions, for she had no qualms about having commercial dealings with the infidel.

It paid the Turks in Jerusalem to be tolerant of Christian worship. The merchants founded a hospital and a convent which were put under the charge of a military order of knights—the Order of St John of Jerusalem, whose members came to be known as the ‘Hospitallers.’ Then came a period when a fanatic Turkish ruler persecuted the Christians, and sacked their church at Jerusalem. Europe on this occasion satisfied her indignation by rounding on the Jews in her midst. Later Caliphs restored toleration, but it did not last long. The Seljuk dynasty reigned twenty years in Jerusalem, and then the sceptre fell to a wilder branch of the Turk family. Toleration was not in their programme, trade or no trade. And a second order of military monks came into being—the Templars, or Knights of the Temple.

About this time the Patriarch of Jerusalem sat discussing the

desperate situation with a Frankish hermit named Peter, who had found his way to Jerusalem. It is hopeless, said the Patriarch in effect, to expect help from Constantinople—the Emperors have retained a high standard of culture, but they have too long been given over to luxury and weakness to rise to this occasion. Moreover, the Imperial army has become such a mixture of nationalities, what with mercenaries of every sort and kind, that it is not to be depended upon. Constantinople, though itself a fortress and hitherto able to withstand the waves of barbarism which have seethed round it, may not be able to hold out much longer. The Emperor has already been beaten in the field. . . . What next?

Peter was fired with an idea. He would rouse the virile monarchs of the West. Europe should rise in its young and enthusiastic thousands and, marching under the banner of Christ, submerge the infidel under a great wave of holy aggression.

Peter succeeded only too well. Some such idea had already crossed the mind of the Pope, and he added the whole force of his approval to the plan. Up and down the land went Peter, preaching, cajoling, harrowing people with his recitals of the sufferings of the pilgrims. In church, cottage, castle, market-place, on the highways, always and everywhere Peter and his helpers preached the duty of enlisting in the cause. The bishops called two great councils to which the clergy and the populace came literally in their thousands. The envoys of the Byzantine Empire added their petitions to the tale. The Pope wrought the great concourse of people to such a pitch of excitement that they were almost delirious. "Wear the Cross," he cried, "a red, a bloody cross. . . . God wills it!" and the people rose as one man.

I expect you wonder why I said, "Peter succeeded only too well." It all sounds so simple: with one heart Christian Europe was to rise and fight for the Cross. It was an inspiration! Unfortunately no ideal has ever been attained by the use of indiscriminate methods; no inspiration which is to serve as the motive-power of many men has arrived pure and undefiled at its goal if it has not followed the path of reason. Peter and the rest of the clergy appealed alike to the leading princes and to the mob. They fortified their appeal by promising them the forgiveness of their sins if they joined the Crusade. The poor might escape the penitential lash, the rich the penitential fine.

The untravelled and the needy mingled with their pious reflections the promise of Eastern spoils. The prudent warrior knew that to aid Constantinople consolidated the bulwark between Turkish territory and Europe. Criminals joined to escape punishment. Labourers who were little more than slaves under the feudal system joined to escape their greedy masters or to ameliorate their lot by serving them abroad. Youngsters

of noble houses thirsted for an opportunity to win their spurs. Before the Crusaders even started the motives of a great mass of them were anything but pure. It was also impossible either to control the excitement of the people or to make adequate preparations for their long and exacting march. The inevitable happened. While the leading princes, notably such men of worth as the leaders in chief, Godfrey de Bouillon, Tancred the



COMBAT BETWEEN CRUSADERS AND MOSLEMS

*From "Early European History," by Hutton Webster
(D. C. Heath and Co.)*

Norman from Sicily, Robert of Normandy (eldest son of William the Conqueror), and Hugh Vermondois of France, were making their rational preparations, a mob of inflamed and ignorant people in France rushed to Peter the Hermit, and persuaded him to lead them forth at once. Another monk followed with just such another rabble from Germany. Preceded by two mascots, a goose and a goat, they launched upon a guideless trek across Europe to Constantinople, which had been chosen as the rendezvous of the various armies. The tale of their passage begins the explanation of my remark about Peter.

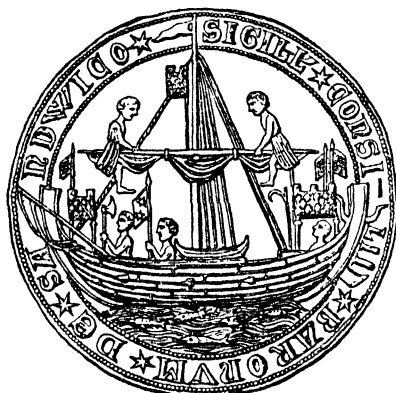
They stole from, fought, murdered, massacred such Jews as they found in their path, and gave way to every vice the undisciplined mob is heir to. By the time they reached the Hungarians they found their match, and the Emperor from Constantinople rescued the fugitive remnant of them, Peter among them, from

the Thracian mountains. It would have been better had he left them to their fate, for no sooner had they recovered a little than they turned their criminal attentions to the riches of their city host. The Emperor tactfully steered them away to Asiatic soil, and there the Turks annihilated them.

The great leaders eventually achieved their end and took Jerusalem, but the behaviour of the Christians towards the

Jews and the Arabs was not such as to bring credit or honour to the faith of Christ.

In the twelfth and thirteenth centuries English and French ships were still single-masted, double-ended, and characterized by their picturesque 'castles' fore and aft. These 'castles' were fortified platforms used for various purposes in peace and war; there might be a third amidships. Richard Lion-heart's own ship, the *Trenc-la-mer* (*Cleave-the-sea*)



SEAL OF SANDWICH

was a vessel of this type. She carried a lantern at the stern as well as at the poop in order to act as leader to the rest of the Crusading fleet on its way from Cyprus to Palestine. During the Third Crusade ships from ports on either side of the English Channel entered the Mediterranean as a fleet for the first time in history.

As builders of seaworthy ships the Northerners may have had little to fear in a comparison with the peoples of the Mediterranean, but in matters of accommodation and of labour-saving devices the latter, with an older civilization behind them, would be likely to lead the way.¹

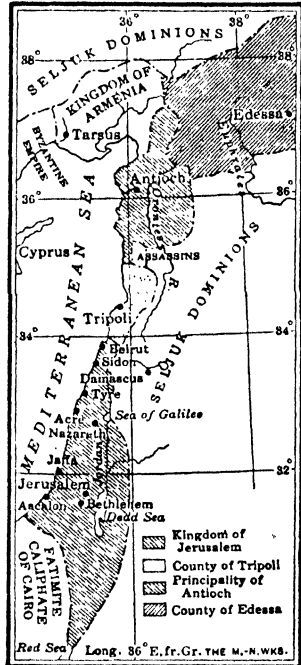
Between the Fourth and Fifth Crusades occurred the tragedy of the Children's Crusade. A French shepherd-boy named Stephen, and a German boy named Nicholas, encouraged by the Pope and popular sentiment, led thousands of boys and girls to their doom. Stephen made for Marseilles, where he believed the Mediterranean would divide like the

¹ R. and R. C. Anderson, *The Sailing-ship* (Harrap).

Red Sea for the children of Israel and allow him and his band to march over to the Holy Land. Hundreds of children died on the way. The survivors were all kidnapped and sold as slaves into Egypt. Nicholas made for Italy, and in Italy the last of his survivors melted away.

We should grow up with a wholesome horror of the mob: a wholesome horror that will prevent our ever joining one. No good thing has ever been brought about by mob-violence or mob-law.

There were eight Crusades (1096-1272)—that is to say, eight expeditions planned on the grand scale. The Christian orders of knighthood held territory in the Holy Land all the time. At the height of their power the Christians had one kingdom, one principality, and two 'counties' in Syria. One kingdom was that of Jerusalem, though Godfrey de Bouillon, its first ruler, refused to wear a crown of gold where his Saviour had worn a crown of thorns. In 1099 he defeated the Sultan of Egypt upon the plain of Ascalon, and thus became possessed of the whole of Palestine with the exception of a few fortified towns still in Saracen hands. The principality was that of Antioch, and the 'counties' were those of Edessa and Tripoli. For nearly fifty years these crusading states not only held their own against all their paynim foes, but also maintained themselves as flourishing centres of trade and commerce. And as time went on the motives which directed these expeditions grew more and more complicated, and more and more involved in politics and in the self-interested demands of trade. Constantinople herself came to play a double game, and flirted with the Moslem. She had been afraid of the power of Frankish and Norman knights from the time some of them passed through Constantinople on the First Crusade. The



CRUSADERS' STATES IN SYRIA

From "Medieval and Modern History,"
by Hutton Webster (D. C. Heath and Co.)

Fourth Crusade was diverted by the skill of the Venetians, who had a grudge against Constantinople, into an attack upon the Eastern Empire. Venice stood to gain enormously in territory and wealth if she could control Constantinople's trading facilities. The Emperor had favoured Genoa over Venice in matters of trade, and the resentment of Venice had reached a point where she would not hesitate to go to any extreme to oust her rival. The opportunity of doing so now occurred. The Crusaders were in Venice, arranging for transport. They found themselves unable to pay immediately for it, and Venice proposed an extension of credit if the Crusaders, before sailing for Palestine, would reduce certain cities in Dalmatia (territory on the east of the Adriatic) which had revolted against the Venetian Republic. The Crusaders agreed, and took Zara, the principal port.

Now, at this time the heir to the Imperial throne, nephew of the reigning Emperor, who had usurped it, was in the West seeking champions to take up the cause of his father and himself. It struck him that he might make use of the Crusaders encamped at Zara, and he sent ambassadors to Venice and to the leaders of the Crusade, offering if they would reinstate him to subscribe to the Crusade, to bring about the reunion of the Greek and Roman Churches, and to give Venice the trading rights she coveted. Dandolo, the Doge of Venice, blind and old, but passionate in the interests of Venice, saw his chance in this offer. He might place upon the Imperial throne a man who by reason of his obligations to Venice would be his puppet.

He pressed the acceptance of the offer upon the leaders of the Crusade. The more honourable refused it and withdrew from the army, but others who were soldiers first and Crusaders afterwards saw in the venture a prospect of gaining wealth, and perhaps territory for the Latin world in general and themselves in particular. These men threw in their lot with Venice and attacked Constantinople. The usurper fled, and the rightful Emperor was installed. But because he owed his reinstatement to the men of the West, of whom the people of Constantinople were jealous and afraid, he was unpopular, and the people rose and rebelled, and he was killed. The Crusaders and Venetians quelled the rebellion and plundered the city, and then divided the spoils of the Empire between them. The new Latin Empire was christened Romania. The Count of Flanders

took the title of Emperor and set himself up at Constantinople, and Venice took the lion's share of the Byzantine provinces.

I am not going into detail about the Crusades as a whole. You all know a certain amount about them, and you know that in the end Jerusalem was left to the infidel. You know that Saladin on the infidel side, and Richard Cœur-de-Lion, Godfrey de Bouillon, and St Louis on the Christian side, were among their heroes. The particular interest of the Crusaders to us lies in the influence they exerted upon the growth of trade and upon the trading cities, and in the contribution to map-making these cities made by the recording of coast-lines and trade-routes for the benefit of their merchants and navigators.

New ideas, new commodities, new fruits, drugs, and fabrics were introduced into Europe as the result of the Crusades. A 'tourist traffic,' as it would now be called, grew up between the West and the Near East, and in consequence men's geographical knowledge was enriched. Henceforth you will find Oriental fables and fairy-tales penetrating European literature, Persian and Arabic words cropping up in European languages, and European statesmen, clerics, and merchants thinking of and dealing with peoples and countries which had seemed to their forefathers infinitely remote—if, indeed, they knew of their existence at all.

CHAPTER IX

GEOGRAPHICAL PROGRESS IN MEDIEVAL EUROPE

It is as well to remember that during the twelfth century, when the merchant cities were developing rapidly along material lines, the Arabs were still the intellectual leaders of Europe. In the Iberian peninsula, which was enduring, as one writer puts it, "one long crusade," the Arab represented the life and learning of the country. When the Mohammedan army crossed in 711 from Morocco, and conquered the Visigoth king, districts protected by the Pyrenees had survived, but they had never regained pre-eminence. It was all they could do to cling to their independence. In the middle of the twelfth century a small patch of Christian territory called Portugal emancipated itself from the overlordship of the Christian kingdom of Leon, and the patch encroached steadily upon Arab land. Some one was opening a door. Not much more than a hand was visible, but the whole dramatic figure of Portugal was behind that door. Her time was not yet, but her destiny was tremendous.

Not until 1492 will Islam be finally expelled, and the last of the scholars depart, taking with them much of the grace of life. The latter-day Arabs were not only cultured, but tolerant, and their cities of Granada and Cordova were the left hand of scholarship, as Bagdad was the right. With the weakening of the Caliphs, very apparent in the twelfth century, the centres of learning began to decline, and many Arab scholars sought fresh inspiration, if not actual refuge, in foreign courts.

The most cultured monarch of the time was a Norman, King Roger II of Sicily, and the most distinguished traveller and geographer was Abu Abdullah Mohammed Ibn Edrisi, "the Arabic Ptolemy." The latter established himself at King Roger's court. King Roger did everything in his power to collect material for Edrisi's work and to forward his researches. Edrisi made a celestial globe, and also engraved for his patron a map of the world upon a silver disk.

The Arabs had decided the world was pear-shaped or egg-shaped. Some Indian and Chinese influences had coloured their ideas, but you will remember that the origin of their studies had been the Greek philosophers. For instance, in the

first half of the ninth century the Emperor at Constantinople had presented to the great Caliph Al Mamoun at Bagdad, who devoted himself to the pursuit of knowledge, a collection of Greek manuscripts. The Syrian Christians translated these into Arabic. (Incidentally, some of the Greek classics eventually reached Western Europe retranslated from the Arabic into Latin. You can imagine what corruption they suffered.)

As the Arabs handed on also their own ideas about scientific geography, which were, contrary to their record of travel, a fresh confusion, Europe had to disentangle it before fresh progress was made. We find Aquinas, the great Dominican philosopher, and Roger Bacon, the brilliant Franciscan scientist, and others wrestling with it in the middle of the thirteenth century. For instance, there was Arim, the summit and centre of the world from which measure might be taken to the four ends of the earth. It lay under the equator, and had no latitude.

Edrisi's work plainly shows the influence of Ptolemy, Eratosthenes, and Strabo, and improves upon it in being able to incorporate the reports of Arab travellers in Asia, India, and Russia. He was the first to give China the name of Cathay (Khitai and Kitai are other forms). He retold what he had heard of China; he never went there himself. He knew Spain, France, Italy, and North Africa from personal experience. A curious story he tells of the "Lisbon Wanderers" reveals the undying horror the Arab had for the Atlantic, and no doubt contributed to the common seaman's superstition with which Prince Henry the Navigator had to deal in later days.

Edrisi describes the voyage of a family of people from Lisbon. They sailed for eleven days until they reached evil-smelling and muddy water covering dangerous reefs, and the light began to fail. They then steered south and reached an island where they found nothing but sheep. They went on southward for another twelve days, and came upon another isle, inhabited and cultivated. The islanders made them prisoners, and hauled them before their king. Happily he possessed an interpreter who could talk Arabic. They explained they had set out to discover what the Atlantic contained. The king was amused; his father had sent out a party of slaves to do that, and they found nothing abroad but darkness. He then had the wanderers bound and blindfolded and carried to the coast of Africa,

where the Moors released them and sent them rejoicing on their way back to Lisbon.

Edrisi fully shared the current Arab superstitions about the dark and dangerous Atlantic. He died in the middle of the century, and was succeeded in importance by a Jewish rabbi, Benjamin of Tudela, in Navarre. Benjamin, if not actually a



OUTLINE SKETCH OF PART OF A PORTOLANO

From "A History of Geographical Discovery and Exploration," by J. N. L. Baker (Harrap)

merchant as well as a rabbi, concerned himself as much in the interests of trade as in the interests of religion. He was one of several Jewish travellers who sought to unite the widespread Jewish communities by bringing them into some knowledge of one another, possibly in the hope that they might attain some political importance as a nation. He travelled from Spain to China, and wrote a record of all the important trading towns of the Mediterranean, of Syria, and of Persia, and made some note of the Russian Jew Khazars. He was not a scientific geographer. His work was notable as a serious Hebrew contri-

bution to a fuller description of the parts of the world he visited.

Neither Jew nor Arab contributed the more practically fruitful examples of map-making. The men of the maritime Italian towns did this. They made *portolani* (portable plans)—clever coast surveys, which showed the direction of the wind, and were the foundation of modern map-making. It was these towns, too, who founded a system of maritime and commercial law which regulated the outburst of seagoing genius which was to come. About 1180 we hear the first mention in the West of the magnet, but it was little more than a mention. In the middle of the thirteenth century Dante's teacher visited Roger Bacon at Oxford, and they bent their heads together over an "ugly black stone" Bacon possessed, which they knew would magnetize an iron needle if rubbed upon it. They knew too that this magnetized needle, if balanced horizontally with freedom to move, would point with a certain measure of accuracy to the pole. But they decided then that there was little prospect of making practical use of such an instrument in finding direction at sea, because no sailor could be persuaded to try it; he would fear it was magic. Nevertheless it did come to be used and to help in making the *portolani*.

The growing importance of these trading towns was the beginning of new things. Venice, Pisa, Genoa, Marseilles (which provided transport for Richard Cœur-de-Lion and his crusading army in 1190), Narbonne (which acted as middleman in trading English tin for Eastern goods), Montpellier (which also profited by the Crusader-carrying trade), and many other mercantile cities initiated a prosperity and freedom of civil life unknown under the one-sided government of the feudal system. As a matter of fact, the initiative and prosperity of towns everywhere was growing apace. New towns arose with rapidity along the routes travelled by the crusading armies, and gradually took to themselves the trade which had hitherto flowed principally to Constantinople. The husbandman profited too. Instead of following his lord abroad, he could buy his freedom and redeem his own fortunes at home. Craft guilds, associations of men engaged in the various trades, had existed from the earliest times, and these now increased in numbers and importance. You know something of these guilds, and how wealthy and what a colourful feature of civic life they became as time went on. The trades unions of to-day

are a poor substitute, for the old guilds protected the consumer as well as the producer, and were concerned with the immortal souls as well as with the perishable bodies of their members.

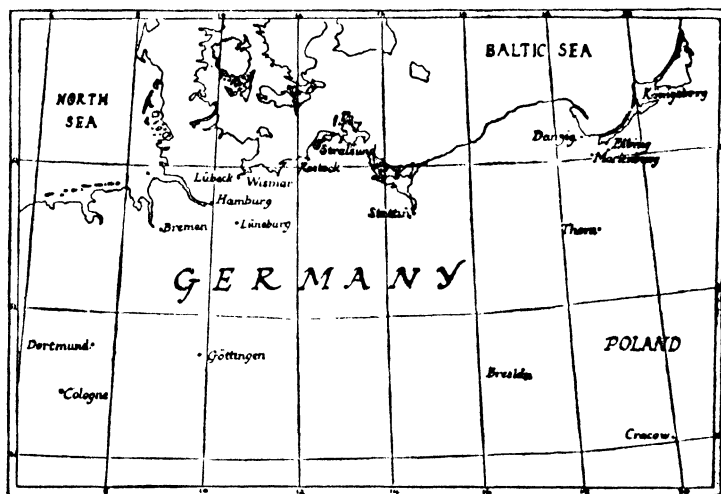
Merchants began to play an important part in national as well as in civic affairs during the eleventh and twelfth centuries, and their power continued to grow as years passed. They lent money—at high rates of interest—to kings and prelates, and by increasing the demand for young men who could read and write and yet were not priests did much to promote education.

The merchant princes all had quarters and factories in Constantinople, and the competition for Constantinople's favour in the granting of trading facilities led to much bad feeling, even to riots and massacre there. At the end of the twelfth century the reigning Emperor, hoping to curb undue influence on the part of any particular town, brought matters to a climax by extending his favour to a greater number of towns, and especially by promoting Genoa over the head of Venice. Venice had possessions from the Adriatic to the Black Sea. On the Black Sea itself she controlled the slave traffic, among other ventures, and supplied Egypt with the Circassian slaves she so specially desired. In spite of Emperor and Pope, she dealt as she wished in Saracen markets. Of the three thousand Western merchants in Alexandria she had the largest proportion. She founded business houses wherever the great arteries of trade formed a junction. She threatened to swamp the Imperial power. At the opening of the next century, in 1204, she actually presumed, as I have already told you, to sack Constantinople.

Meanwhile other folk than the Italians were gaining power and knowledge. In Catalonia, in Spain, Barcelona was producing sailors who approached the Italian standard. The town became a free port for all Mediterranean ships, which was a great encouragement to merchants to traffic there. Catalans too drew coast surveys, and theirs was one of the earliest world maps of the new era. The towns of Hamburg and Lübeck (founded by Saxons in 1143), in North Germany, burst into prominence in the middle of the thirteenth century as co-founders of the Hanseatic League—a great league of seventy trading towns which shared ships, storehouses, and facilities abroad, and whose merchants travelled in company and backed each other up generally. Jews, though homeless, had quarters wherever trade was thickest. They founded a colony

in China. In Thebes there was a Jewish colony of two thousand dyers and silk-workers. Nor were they only traders. Jews have always had intellect, and at this time they were pre-eminent in medical science. The Pope himself actually had a Jew in his service at this time, so valuable were brains in these old days of an eagerly developing western and north-western Europe.

New and interesting institutions also appeared in the



TOWNS OF THE HANSEATIC LEAGUE

thirteenth century. The Franciscan and Dominican Orders were founded. Venice founded her bank; Paris, Oxford, and Cambridge their universities. Reggio and Modena founded schools of civil law.

In this century Matthew Paris, the monkish chronicler of St Albans, draw a map of Great Britain which shows how little he knew about the actual shape of the island on which he lived. He does realize that Wales forms a peninsula to the west, but he is vague about the relative positions of London, Canterbury, York, and Durham, which he puts in a straight line running almost due north and south, while his Scotland looks like two flattened balloons inflated to the east and west.

Let us now turn to the time when the reappearance of the Mongol awaits us, and to the travellers who set out for Cathay. Remember that Europe, despite all the advances we have

recorded, was still only just emerging from the Dark Ages, and had still much to learn and far to go. Men knew nothing at all of two of the continents upon their globe—men, that is to say, who did not happen to live either in America or Australia. In spite of the efforts of a learned King of Castile, Alfonso the Wise (brother of our own Queen Eleanor), to get some improvements made in astronomical calculations, the Ptolemaic system, teaching that this world was the centre of the universe, still held the field. It would be almost impossible for a modern boy or girl to unlearn their lessons so thoroughly as to be able to put themselves in the mental position of a grown-up and educated man of the thirteenth century.

CHAPTER X

EARLY MISSIONARY JOURNEYS TO THE FAR EAST

ON Easter Day in the year 1245 a German Franciscan friar set off from Lyons on a long and perilous journey. He was going as a messenger from the Pope to the Mongols of Central Asia.

John Plano de Carpini was sixty-five years old and very corpulent, we are told, and he suffered untold privations on his journey, going nearly always in fear of his life, often without food or shelter, and frozen with cold. His only European companion on the journey was a Polish monk, Friar Benedict, who acted as interpreter.

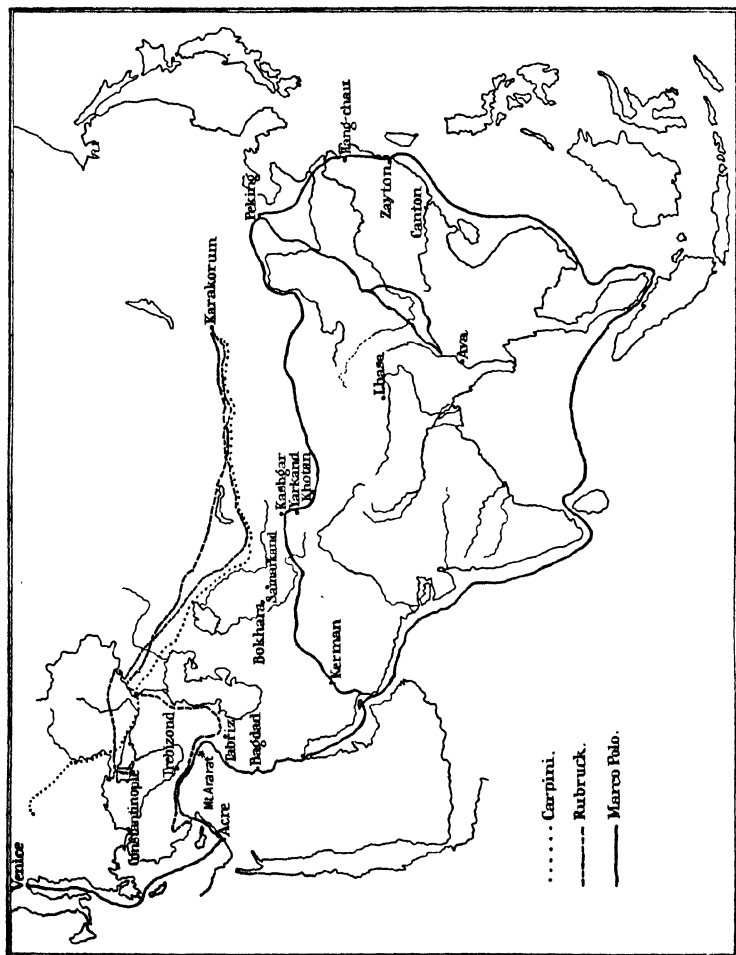
He journeyed through Bohemia and Silesia, passed on from one ruler to the next, and eventually arrived at Kiev, then the principal town of Southern Russia. He interviewed the nobles there, and they advised him not to take the horses he was using any farther, for he would not know how to dig their feed out from under the snow. The friar paid with 'gifts' for the necessary trained post-horses and a guide, and set out for a town a little farther down the river Dnieper, where lay the first stronghold of the Tartars. Here he was met by a ferocious rush of armed men who demanded his credentials. He told them he was the Pope's envoy come to offer them peace and Christianity, and to express the Pope's astonishment at their wanton attack upon Christian peoples. They let that pass, and while waiting for more post-horses in return for more 'gifts' he observed their persons and customs.

They lived in white felt tents, "cunningly made," erected over a wicker frame with a hole in the top to let the light in and smoke out (much like the Red Indians). The next missionary among them, William of Rubruck, tells how they decorated the circle round the vent-hole, and the flap over the door (also like the Red Indians), and how some of the tents were of black felt. When the encampment moved they carried the tents in carts. They had more horses and mares, Friar John thinks, than all the rest of the world put together. Mares' milk was their staple drink, though they often intoxicated themselves with fermented stuff. Thin gruel, flesh, and broth

was the recognized diet, supplemented by the luck of the hunter. They neither quarrelled nor stole among themselves, and nobody locked anything up, though they had much silver and gold and precious stones. But foreigners they disdained, and thought them and their belongings fair game. Their devotions included worship of the moon, and they launched upon new enterprises at the new moon. They closely resembled their predecessors, the Scythians of classical history.

Carpini in due course reached the court of Batu, a ruler of the Mongols on the western frontiers of their empire, on the Volga, and had to contend with endless suspicion. He was made to undergo the test of walking between two fires before he entered the presence. Batu, he remarks, "carries himself very stately and magnificently." He had tents of linen cloth looted from the King of Hungary. Batu detained some of the little company, possibly as hostages, but sent the rest on to Kuyuk, the Khan elect, with amiable recommendations. By this time, what with starvation and other dangers, Carpini was so feeble he could hardly ride. It was Lent, and his sufferings were thus complicated, for on fast days a little snow melted in a kettle was all his conscience would allow him. Good horses were plentiful, and the company was able to change them five times a day. When he arrived at Kuyuk's court in the plains of Karakorum he found the chiefs assembling for the coronation, "each one of them riding up and down with his train over the hills and dales," and bringing cartloads of treasure. On the first day of the successive ceremonies they wore white, on the second scarlet, on the next blue, and on the last brocade.

The missionaries were invited to the coronation, which took place in a great tent, called the Sira Orda (the Yellow Pavilion), pitched in the mountains. Here in the Khan's train they came across a Russian goldsmith who procured them food, for though Kuyuk had ordered a tent to be provided for them, he had overlooked means of sustenance. Carpini presented the Pope's letter, and received the Khan's answer. It is dated November 1246, and lies now in the Vatican Library with the Khan's seal upon it. Far from submission, it suggests that the Pope and the great kings of the West should travel to the East and present their own submission. It defended the attack upon Europe on the score that the ten Mongol envoys had been murdered. Carpini tells us that the Mongol never forgave treachery to an ambassador. As for the Khan's personal



THE OPENING UP OF ASIA IN THE MIDDLE AGES

From "A History of Geographical Discovery and Exploration," by J. N. L. Baker (Harvard)

baptism, he could not understand how that was going to alter the situation. God had given him many victories already.

The Khan wanted to send ambassadors back with the friar, who skilfully avoided the honour, fearing the Mongol would discover the "wars and dissensions among us," and their office resolve into that of spies rather than ambassadors.

The Khan's mother showed the company some civility, and gave them fur-lined cloaks, necessary for the journey, and some purple stuff, a good deal of which their Tartar servants afterwards stole. The journey back was terrible. Often the snowy ground was their only bed. They retraced their steps to Batu's court and to Kiev, where the citizens were overjoyed to find them still alive. Carpini delivered the Khan's answer to the Pope at Lyons at the end of two years of travel.

In the account he wrote of his adventure he had much to tell, and what he had actually seen himself was accurate and interesting. He described the history of the Mongols from hearsay, and also repeats marvellous tales of men in distant places who bark like dogs and have no joints in their limbs. He was a brave but simple creature. He says, anxious to discover signs of welcome to Christianity among the Mongols, that they revered Jesus Christ and the Scriptures. What he saw was the remains of Nestorian teaching, and the genial tolerance of the reigning house for religious points of view other than its own. He found they had monks and monasteries. (These were Buddhist.) He wrote, "The men of Cathay are pagans. . . . They adore Christ Jesus our Lord, and believe in the article of eternal life, but are not baptized. . . . [They are] courteous and gentle people. . . . There are not better craftsmen in the world." He tells of that fabulous monarch, Prester John, "Ruler of Major India." "Indians are the black Saracens, Ethiopians." But he knew of Prester John only by hearsay, and you realize how vague are the friar's ideas about him.

Shortly after Friar John's return Kuyuk Khan died, and Mangu, his cousin and grandson of Zinghis Khan, came to the throne. It was to visit Mangu that the second great traveller set forth. He was a Frenchman of the order of Minor Friars, and his name was William of Rubruck, a stout, brave man, shrewd and observant. His journal is one of the most valuable books of travel we possess.

Friar William was in the train of King Louis of France (St

Louis) when he set out on the Seventh Crusade. In Cyprus they heard from a Persian envoy that Sartach, a son of Batu and one of the lesser khans of the Zinghis house, ruling in the southern Volga district, had become a Christian, and also that the mother of the Great Khan Mangu was a Christian too, and the court hospitable to folk of that creed. King Louis determined to send a mission to the court, and he chose Friar William to lead it. William set out armed with presents—a Bible from the Queen of France, the Psalms beautifully illuminated—and with one or two other literary treasures in his pack. It was the year 1253. William travelled for two years and covered five thousand miles. He begins his journal with a quotation from Ecclesiasticus on the wise man: "He will travel through strange countries; for he hath tried the good and the evil among men." William certainly had his fill of travel, and not only he but all men who read his work were the wiser for his adventure.



BUST OF ST LOUIS

He first crossed to the Holy Land, and took ship at Acre for the Black Sea. He was making for Soldaia (Sudak, in the Crimea), an important trading station whence he would set out on his enormous overland journey to Karakorum and the Mongol court. The Venetians had founded a factory at Sudak three years before, but the town and the whole district paid tribute to the local khan. William tells us of the Turkish merchants he met there "who traffic in the North Countries for ermines and grey furs and other costly skins." Other merchants dealt in cotton and silk clothes and spices. Merchants in Constantinople advised him not to take carts on hire from the citizens, but to buy covered carts of his own, "such as the Russians carry their skins in," and to use oxen as draught cattle. This was a more satisfactory method than pack-horses, which require constant unloading and reloading. William had to placate the Mongol overlords of Sudak with presents in order to procure a guide and a safe-conduct. He had taken the precaution to bring presents with him from Constantinople. He had also brought a slave there as a servant. Friar Bartholomew of Cremona had borne him company, and with two other companions and the drivers, the travellers numbered but seven in all.

They reached the court of Sartach, three days' journey from the Volga, only to discover he was not a Christian after all. It was a report set about by the Nestorians, who, William bitterly remarks, are never to be trusted. Subsequently, when he reached the court of the Great Khan, he suffered much indignity at their hands. He tells us much the same things about the Mongol customs as Friar John does. He too observes that they never wash their clothes. Clothes hanging out on the line offended heaven, they believed, and might cause thunder. They hated thunder, and rolled themselves in felt and hid till it was over. They washed their eating utensils by rinsing them in hot broth from the pot. At the doorway of the tent of the head of the family stood a minstrel and a pitcher of mare's milk. When the master of the house would drink the minstrel struck up, and he continued playing till his master's thirst was quenched. In camp the tents were arranged between the carts, the carts forming a rampart, much like a German camp of Cæsar's day. The chiefs had beautiful silk stuffs, cloth of gold, and cottons from China and Persia for their summer clothes, and wonderful furs from Russia for winter.

They treated William scurvily, for they were very suspicious of him. Dirty, sour milk was all he got to drink, and but for his having taken in a supply of biscuits at Constantinople he would have starved. Starvation was an ever-present danger throughout the whole journey, but William says little of such trials. There were Armenian priests at Sartach's court who acted as interpreters, and there was a Knight Templar there too. William gave King Louis's letters and presents to Sartach, who decided to send him on to the court of his father, Batu. It was a trying journey, and the fear of murder accompanied the party all the way. "Some devil," too, had sent Moslem missionaries to the district. A Saracen received him when he arrived at Batu's court. A tent was provided for him, but no food. Batu eventually received him, seated on a gilt dais with one of his wives beside him.

Batu decided to send the party on to Mangu Khan, but ordered one member of it back to Sartach, probably as a hostage. He gave them guides, and furnished them with clothes suitable for the country they would have to pass through—furred gowns and breeches and felt boots. Post-horses were the method of transport, but William and his party were always given the worst because they were strangers. A little millet for break-

fast and no more food till evening was all their fare. "Of hunger and thirst, cold and weariness, there was no end." They came to a village on Lake Balkash where there were Saracens speaking Persian (this was not the first Mohammedan stronghold they had come across), and some way east of the lake they came upon an important market-town and plenty of merchants. They then entered the plain where Kuyuk Khan had held court. His widowed sister-in-law, evidently a Christian, or at least very sympathetic, kept William's party for two days, in order to obtain William's benediction and prayers. A mountain road now faced them, and at the end of it they emerged into a plain "as vast as an ocean" and without a single hillock; there lay the capital town of Karakorum and the court of the Great Khan Mangu.

At court they found a Hungarian servant—a prisoner of war, one imagines—who acted as interpreter. The First Secretary was a Nestorian Christian, "by whose advice everything is done at court." The officials imagined the missionaries had come with peace offerings and submission. "They are so haughty," writes William, "they imagine that the whole world seeks them out to ask to live in peace with them." The situation required a good deal of tact that mischievous messages might not be carried to Mangu, but the diplomatic friar was well equal to it. He and his company had had a very poor lodging assigned to them wherein to await the Khan's pleasure. Meantime William noticed a house with a cross on the door, and, thrilled at the thought that here might be a genuine Christian of his own creed, he knocked. He found an Armenian monk who had arrived the month before. He was something of a rascal, and subsequently gave William many an uneasy moment. He had been a hermit, so he declared, on the outskirts of Jerusalem, and had come east in obedience to a vision. He now showed his calibre by informing William that he had told Mangu that if he became a Christian the whole world would be at his feet, and the "Pope and the Franks be loyal to him"; and he advised William to pitch the same yarn. William repudiated any such corrupt methods of conversion. His answer is worth recording: "Brother, I will willingly tell him to become a Christian, for I have come for that, and I will give this advice to the whole world. I will also make him see how much the Franks and the Pope will rejoice at it, and will promise him that they will look upon him as a brother

and friend; but that they would become his slaves and would pay him tribute, that I will never promise, for then would I be speaking against my conscience.”¹

Before William departed the monk confessed he had never been received into holy orders; and when William made inquiries about him on his return to Palestine he found he was a cloth-weaver by trade, and quite illiterate. Such behaviour did not add to the repute of Christianity in far countries.

There was a surprising assortment of foreigners in Karakorum. One whole street was given over to Chinese craftsmen; another street to Mohammedan traders. The Mohammedans had built two mosques in the place, which flourished beside a Nestorian church and twelve pagan temples. There was a Greek knight who recognized William's order and was friendly. There was a Christian from Damascus who had come to pay tribute on behalf of the Sultan of Mont Real and Crac. There was an ambassador from Vastacius who asked leading questions about France, and William had to be careful. Vastacius was John III, the legitimate Byzantine Emperor, at present ruling in exile in Nicæa, a province of Asia Minor, while the Westerners still ruled at Constantinople.¹ There was a Russian goldsmith who befriended William and his party and gave them food. There were ambassadors from the Caliph of Bagdad and from the Turks, and an ambassador from, as William describes him, the Sultan of India. This envoy brought eight leopards and ten greyhounds, all taught to ride behind a man on horseback. There was Basil, the son of an Englishman, born in Hungary. He spoke several languages. And there was Paquette, a woman of Metz, in Lorraine, and a prisoner from Hungary. (One imagines, though William does not always say so, that many of these foreigners were prisoners of war.) Paquette's husband was a Russian and a carpenter, and, being a craftsman, was held in respect, as all craftsmen were in this part of the world. Best of all, there was William Buchier, of Paris, a goldsmith, of whom Paquette first advised William. He had been captured at Belgrade. William Buchier's wife was born in Hungary and spoke French, and the pair took Friar William to their hearts. Both William Buchier and

¹ In 1222 John III had succeeded his father-in-law, who when Constantinople fell to Venice and the leaders of the Fourth Crusade collected the Byzantine aristocracy and ruled over them as legitimate Emperor in Nicæa. John reigned in Nicæa until 1254. He was an able man, and that the Empire was restored in 1262 was due in great measure to his life's work.

Paquette were in the service of the Christian daughter of the Great Khan, to whose mother, also a Christian, the Khan had been devoted.

William Buchier made a pretty toy for the Khan's palace at Karakorum. It was a silver fountain made like a tree. At the foot were four silver lions whose mouths gushed mares' milk. Four gilded serpents twined round the trunk, and from their mouths in the tree-top poured honey-drink (*bal*), rice mead, wine, and milk, which fell each into its own vase at the foot of the tree. Surmounting the whole structure was an angel with a trumpet. When the cupbearer wanted drink for the guests at the feasts he called upon the angel to blow the trumpet. Forthwith the chosen beverage appeared. I imagine this is one of the earliest soda-fountains on record. The miracle was worked by servants placed in a vault under the tree. A pipe ran up the trunk to the angel, and a good blow with a pair of bellows sent up sufficient wind to work the mechanism.

The friar picked up a good deal of information about Cathay. The Nestorians and Saracens were treated as foreigners, but there were as many as fifteen Nestorian churches in Cathay, and one of the towns—Hsi-an Fu—even had a bishop. Craftsmen and doctors there were in plenty. The Cathayans he described as "little brown men, like the Spaniards." The priests wore orange robes, and used rosaries. There were hermits in their order. He tells us of the paper money used in Cathay and of Chinese writing, of which his was the first account to reach Europe. The writing was done with a painter's brush, and "a single figure comprises several letters, and signifies a word." It read from right to left. The Tibetans wrote from left to right with characters much like ours. William Buchier told him of isles in the sea beyond Cathay, which were surrounded by ice in winter, a circumstance which helped to protect them from Cathayan attacks.

The time came when at last William gained audience with the Khan. He and his companions were searched for knives before they entered the presence. The audience chamber was hung with cloth of gold, and had a fire in the centre. Unfortunately the butler had made the interpreter drunk, and William, fearing that his interpretation would suffer from indiscretion, demurred at his services. So the Khan produced a Nestorian linguist. William explained how King Louis had sent to Sartach in the belief that he was a Christian; and

how Sartach had sent him on first to Batu, then to the Great Khan himself. He petitioned that he and his comrade should be allowed to remain as missionaries, or, at any rate, to abide in the country until the cold was over, for his comrade was too feeble to travel. No definite answer was forthcoming at the moment, and on leaving the presence officers of the court pumped William about the resources of France. William resented their curiosity and answered evasively, for he had not the least doubt that the inquiries originated in a desire to sound the power of the West for the Khan's information. A messenger later brought them a message giving them permission to remain in the country for two months.

William made up his mind that there was little to be done even if he stayed longer than that. The Nestorian monk had told him that the Khan "believes only the Christians," but that he wanted all creeds to pray for him. This was an explanation of the fact that at banquets it was Mangu's custom to invite in turn the Christians, the Mohammedans, and his native idolators to come in and give him their blessing. "The monk lied," says William shortly, "for the Khan believes in no one."

The Nestorian community made him welcome, and on Easter Sunday he watched the baptismal service in the Nestorian church. He tells us there was a swarm of Christians in the country—Alani, Ruthenians, Georgians, Armenians (all captives from the Black and Caspian Sea country), and Hungarians—none of whom the Nestorians would allow to come to church unless they submitted to Nestorian baptism. At a final audience before William left the Khan collected representatives of all the different creeds, and had a grand debate, when each held forth upon his own religious beliefs.

At last, armed with the gold tablet—"a plate of gold wide as a palm and a cubit's length"—the Khan's safe-conduct, William set out for home. The party varied its course on its return journey, and travelled north of Lake Balkash, and when they left the courts of Batu and Sartach they dipped south along the coast of the Caspian, and made for Palestine, where William hoped to rejoin King Louis. King Louis had gone home long ago. In the monastery at Acre William wrote his dispatch to the King. It is interesting to remember that Roger Bacon met William of Rubruck, and read the record of his journey. The result of their intercourse appears in one of Bacon's works.

CHAPTER XI

CHINA THROUGH THE EYES OF MARCO POLO

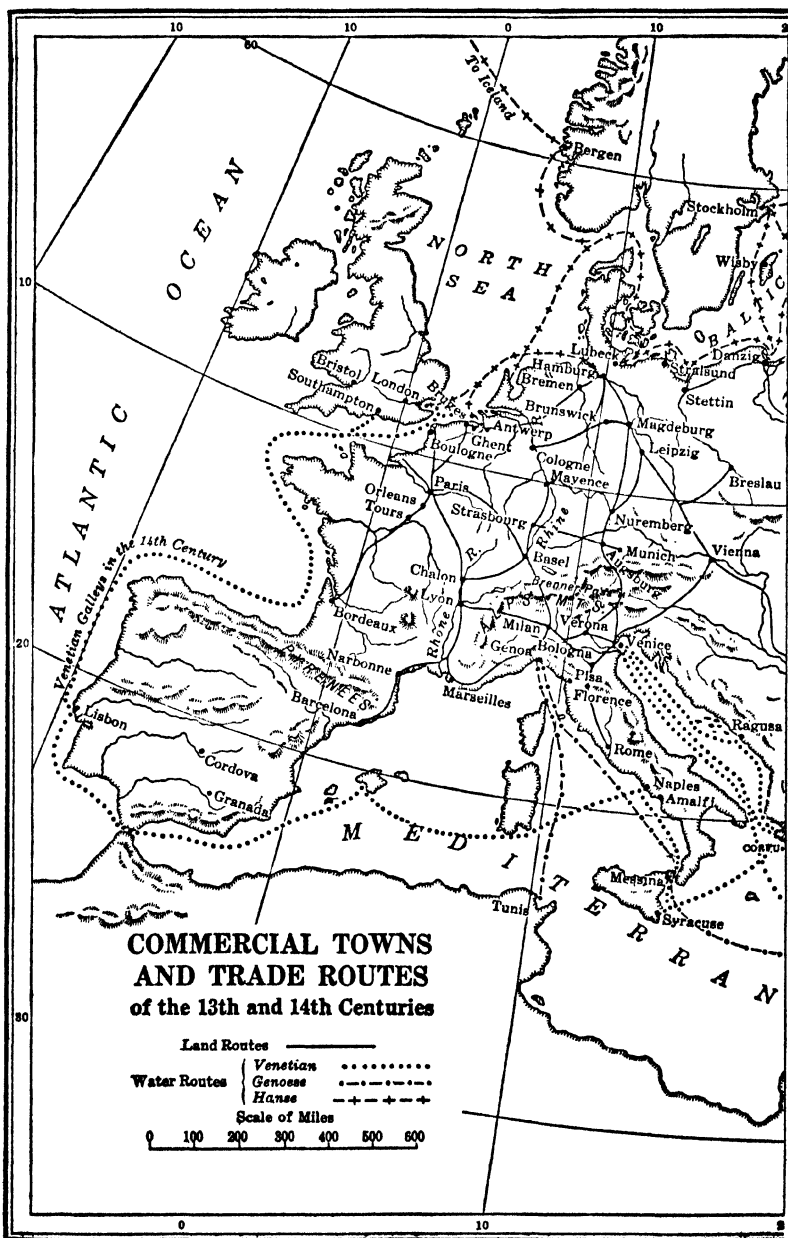
In Xanadu did Kubla Khan
A stately pleasure-dome decree:
Where Alph, the sacred river, ran
Through caverns measureless to man
Down to a sunless sea.

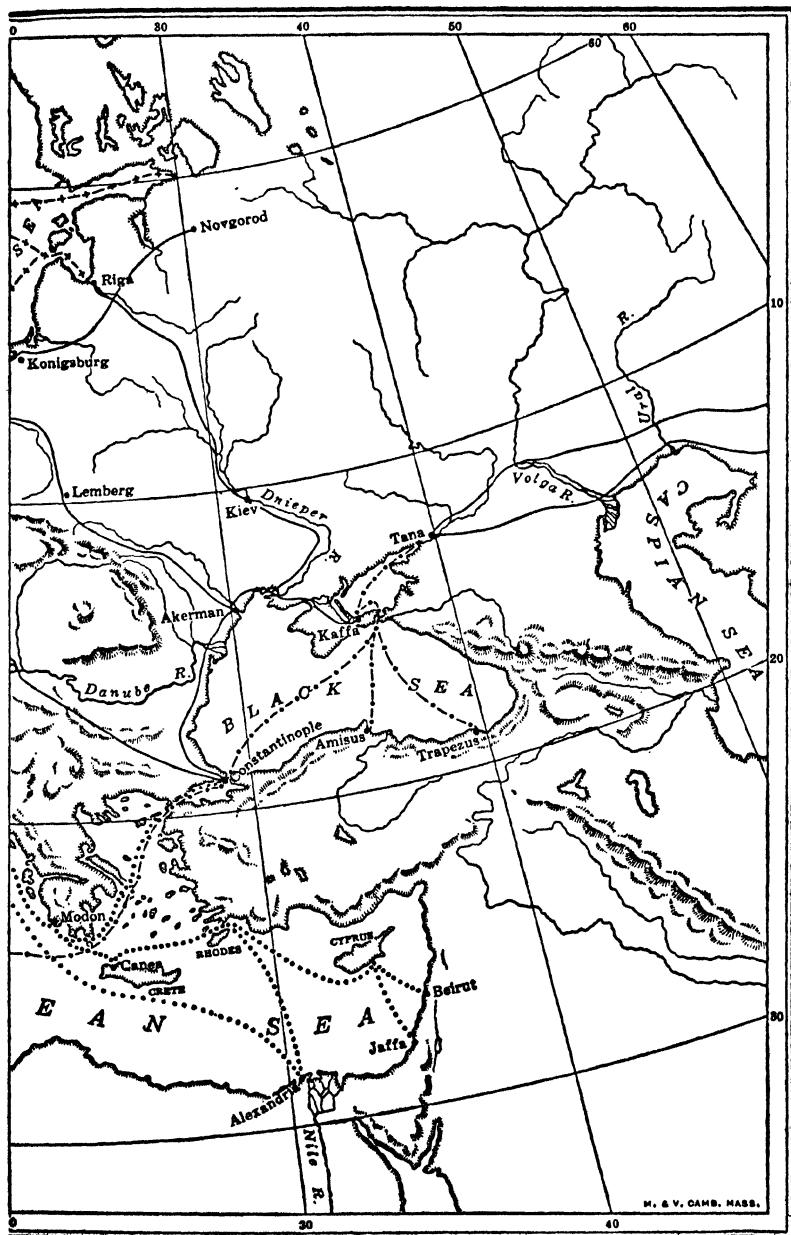
SAMUEL TAYLOR COLERIDGE

IN thirteenth-century Venice there lived a family of enterprising merchants called Polo. They were two brothers, Niccolò and Maffeo, and Marco, Niccolò's son. Niccolò and Maffeo were among the merchant princes who possessed factories and direct trading facilities in Constantinople and in the Crimea, and about the time when Friar William returned home they were on a trading journey in the Crimea district occupied by western Mongols. Marco at this time was a child in Venice, and did not accompany his father and uncle.

A civil war broke out among the Mongols, and the disturbance prevented the brothers' return. The only thing to do was to go on, so they followed the caravans to Bokhara. This was the beginning of their first great adventure. They stayed in Bokhara for three years. It was one of the great towns of the eastern trade routes, and while there they heard much of Cathay and of Kublai Khan, who had succeeded Mangu. His court was "somewhere near the Wall of China." (Later on he made Peking his capital.) Some envoys from Kublai appeared in Bokhara, and the brothers, fired with the ambition to visit the famous Khan, arranged to travel under the protection of the envoys to their master's court.

Kublai received them courteously, and was greatly interested in their accounts of Western civilization. He was sufficiently curious about Christianity to send them back with a request to the Pope for a hundred missionaries to come and explain the Christian doctrine to his people. It took the brothers over three years to get home. The Pope to whom the Khan had directed his message was dead. Niccolò's wife too was dead, and his son Marco grown into a fine, tall stripling. Niccolò decided to take Marco with them when they returned east. They waited in Venice for two years for the election of a new

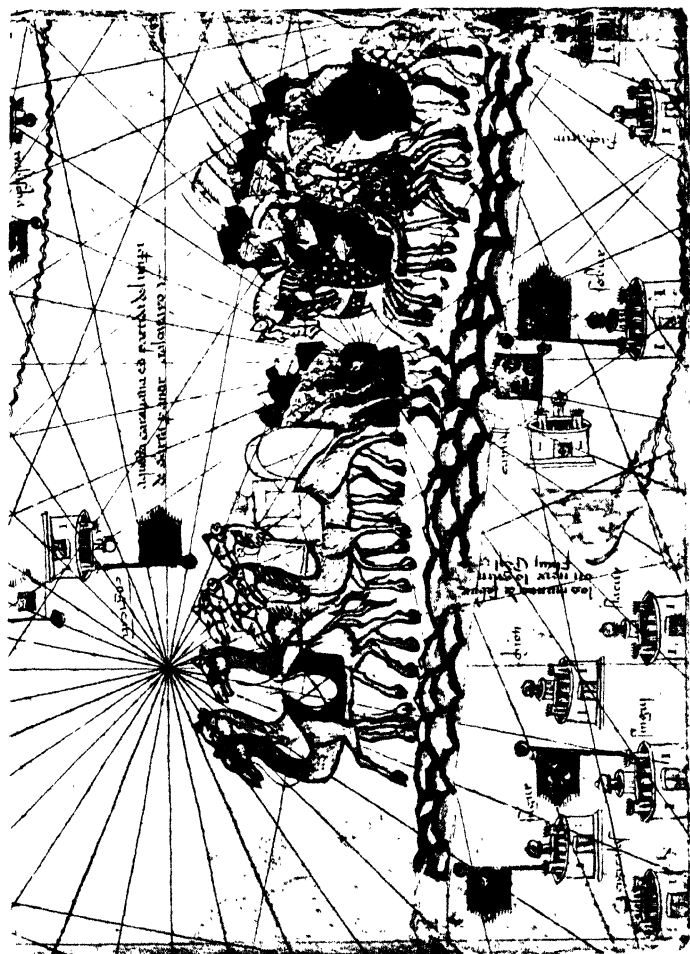




Pope that they might present the Khan's petition, but the election was still delayed, so they set out again for the Khan's court without the missionaries. The Papal Legate at Acre gave them an official letter of explanation. They had not got very far before the Legate recalled them. The Pope had been elected. A hundred missionaries were evidently beyond his powers of organization (he was deeply involved at the moment in politics and his quarrels with crowned heads), and he sent only two fainthearted friars, who held out only as far as Armenia, and there deserted, scared by the rumours of war. The Polos, having done their best for the missionary project, relinquished that hopeless effort, and continued their journey. Little did they know how long it would be before they set foot in Venice again.

It took them three and a half years to reach Peking. They arrived in the middle of 1275. Once established at court, the Khan found them so useful that he kept them in his service for seventeen years. Even then it was with the greatest difficulty that they released themselves from a service over-prolonged and an experience that was losing its charm. The elder men had been acting as consulting engineers to the Khan. Among the things they taught him how to make were the great catapults, 'mangonels,' which Western folk used in siege warfare. The Khan particularly admired Marco. He made him a counsellor and for three years the governor of one of his provinces, and employed him upon diplomatic missions not only in China itself, but in Tibet and India.

Marco wrote a book—the most famous travel book of the Middle Ages. It brought to Europe for the first time exact and detailed information about the Far East. He described the whole of the country he passed through when on official business. He wrote of the people, their occupations, trade, manners, and customs; of roads, rivers, ports, public services—nothing escaped him. He wrote of the outward journey to China overland from Venice, and the homeward journey by land and sea. He gathered information in China of Japan, which even the Great Khan had been unable to conquer. The Japanese had much gold, he heard tell, and ate their unransomed prisoners, an economical but unprepossessing custom. He told too of the existence of islands whose description points to the Philippines. (The clouds of mystery are now lifting from the "Sea of Pitchy Darkness.") He talked with Arab



THE POLO BROTHERS STARTING ON THEIR JOURNEY

The wording above the cavalcade reads, "This caravan has started from the Empire of Sarra to proceed to Cathay."

From "Atlas Catalan de la Bibliothèque Nationale de Paris"

pilots and traders, who told him what they knew of the islands of Java and Sumatra, Borneo and the Andamans; of Socotra ("Soccotera"), where the people were "native Christians." They had an archbishop subject to the Nestorian patriarch at Bagdad. They traded in gold and in ambergris (a fragrant substance which comes from the inside of the whale and is found floating on the water). Pirates had strongholds there, watching for the ships from Aden, all of which called at the island. Sorcerers there pretended they could raise storms, and cast spells to draw to the island any ship which threatened to pass by without calling. Marco knew of the ivory trade of Zanzibar, and of the curious yet beautiful beast with a long neck and brown spots called a giraffe. He told of a great island off the east coast of Africa known as Madagascar where lived a giant bird called a "ruhk." Marco thinks it must be a griffin, but the editor of the edition of Marco Polo's book which I am using thinks it was probably an albatross. Marco knew that the Khan had sent a messenger to the island ostensibly to inquire after one of his people who had been detained there, but really to examine the truth of the wonderful stories he had heard of the place. The messenger brought back a ruhk's feather, which the Khan wore in his headdress.

I can give you but a slight impression of all he tells us. You may perhaps read his book for yourselves some day. I must content myself here with giving you an idea of what he saw of Far Eastern civilization. Shall we start with a description of Kublai at home in his palace at Peking, where he held court during the months of December, January, and February? The palace was built within a great square of country surrounded by a moat, and had several rings of walls, one inside the other. (Old Ecbatana was built like this. The Greek historian Herodotus describes it.) The spaces between the walls accommodated the soldiery and a great park filled with game, trees, pastures, and other delights. The Crown Prince had his separate establishment within the square, and another building housed the Khan's treasure, his gold and silver plate and jewels. The palace itself presented a splendid spectacle, with its gleaming battlements and its roof of highly glazed tiles coloured red, green, azure, and violet. The windows were made of some vitrified substance "as clear as crystal."

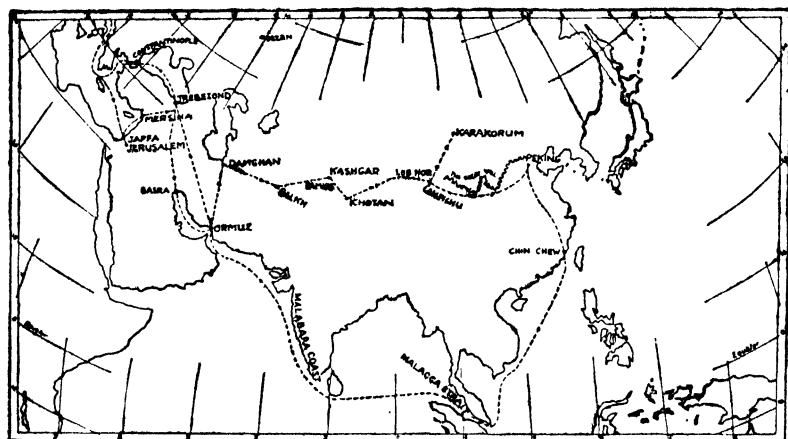
Within the great hall was decorated with gilding and carving and frescoes, and the inside of the roof was so covered with

paintings of beasts and birds and dragons and battles that nothing else could be seen. The carpets were so exquisite that visitors were obliged to hand their footwear to a servant before entering and to don boots of white felt.

The Khan himself was of middle height and well formed, with a fair, healthy complexion, black eyes, and a prominent nose. Splendid ceremony surrounded him. A bodyguard of twelve thousand horse served him in shifts of three thousand at a time, but this number was not on account of any apprehension about designs on his person, but to give expression to his dignity. A council of twelve noblemen controlled army affairs, and another council of twelve directed provincial administration. Mohammedans held many of these high offices. Kublai exercised a definite policy of religious toleration. It paid him to keep all his subjects content, especially those about the court and the capital city. The disciples of every creed within his realm shared the honours of the great court feasts. There were thirteen special official functions during the year, when ambassadors were received (they all had to wait to be received together at such a function), but besides these Kublai observed the principal religious festivals of Christians, Jews, Mohammedans, and idolaters. And you must remember that Kublai was not himself a Chinaman: he was a grandson of Genghis Khan, the great Mongol conqueror, who hailed from Lake Baikal, and who took the old town of Peking (a little south-west of the site occupied by Kublai) in 1214.

The Polos once asked the Khan why he would not embrace Christianity, and he answered that he would do so if they could produce priests who could perform as many miracles as could the Buddhist magicians. Otherwise, he asked, "wherefore should I become a Christian? You yourselves must perceive that the Christians of these countries are ignorant, inefficient persons." The Polos found in every orthodox Chinese house a tablet with a name upon it—the symbol of the Sublime God. To him were offered prayers only for a sound mind and body. Beneath this tablet stood the statue of the god of earthly things. To him they allowed a wife and children, and prayed to him for all the worldly joys men wished to possess, such as fine weather, riches, and good children. They believed in an immortal soul, but did not believe that on leaving the body the soul immediately went to heaven

or to hell. The soul had to work out its own salvation after death, and it was reborn again and again, passing from one body to another, from one life to another. As it had behaved in a previous life, so would its next body meet its deserts. The soul was subject to class distinction too. A good servant would in his next incarnation go up a step in the social scale. A good artisan would become a mandarin perhaps, whereas a greedy man might become a little pig or a quarrelsome woman a tiger.



MARCO POLO'S WANDERINGS

On the Khan's birthday, September 28, people of every creed offered prayers for him, and everybody sent him presents. The birthday feast was one of the most splendid of the year. Twenty thousand courtiers appeared in the official dress of gold silk with curiously embroidered belts of chamois leather and satin boots. The Emperor wore cloth-of-gold. Another great festival was the White Feast, the Tartar New Year. On this occasion everybody wore white, and sent presents of white cloth to each other. All landowners sent white cloth among other offerings to the Khan. Part of the ceremony of the day was the exhibition of the Khan's treasures. Five thousand elephants richly bedecked in embroidered cloths and harness led the procession through the streets, followed by camels, all heavily laden. At the feast itself a tame lion, the present of some foreign potentate (for there are no lions in China), was brought to the Khan's feet.

The Khan was an extremely wealthy person. He controlled all the actual gold and silver in the realm. He used paper money as currency. Even foreign traders were obliged to take paper money in payment, and to exchange its value into local merchandise before they returned home, where the Khan's currency would be valueless. The mint was at Peking, and gold and silver bars were issued by permit only to craftsmen who required them for manufacture. The notes were of paper made from the pulped inner bark of the mulberry-tree. They were cut into oblongs of different size, and bore the signatures of duly appointed officials and the imperial seal in vermilion. Damaged notes could be returned to the mint and replaced at a charge of 3 per cent. You can think out quite easily how much the Khan profited by all this. In some few parts of the provinces cowry-shells were current coin, but paper was in almost universal use.

Hunting was a favourite pastime of the court. Two brothers served the Khan as huntsmen, one in a red uniform and one in sky blue. Besides attending the ruler's hunting expeditions it was their duty to keep the court supplied with game and fish. They had five thousand hunting dogs under their care. In the order of the hunt dogs and servants encircled a day's march of country and drove the game towards the Khan and his suite, stationed in the centre of the circle. Not only dogs served the purpose of hunting. Eagles and other birds of prey bore down upon their natural victims. The cheetah (as in Egypt of old time) rode behind his master on horseback. Lions were used too.

A bowshot from the palace rose the Green Mountain, an artificial mountain topped by a green pleasure pavilion which had been made at the Khan's direction. Every species of tree known in the Khan's dominions grew upon the mountain. The Chinese understood the secret of transplanting very large trees without disaster, and the report of a new and curious tree was enough to get it transplanted as soon as possible to the Khan's pleasure grounds. Two great holes, excavated when the mountain was constructed, were transformed into ponds. One was used for watering the cattle, and the other, nearer the palace, was stocked with fish and water-birds.

Marco tells us how courteous were the Chinese; how they all had "an air of good breeding." They ate daintily. They were a clean people, with their public baths for the poor and

in every house of wealth and rank a bathroom. Every one had at least three hot baths a week, which is more than can be said for nineteenth-century Europe, or for the China of our own day. In this connexion he gives us a very interesting piece of information. So much wood was necessary for heating baths that the supply of fuel would have failed had they not discovered "a black stone which they dug out of the mountains, where it runs in veins." This was coal.

In the suburbs of the city were many stately buildings, and special inns for the use of foreign merchants. The amount of merchandise that found its way to Peking was enormous. "To this city," writes Marco, "everything that is most rare and valuable in all parts of the world finds its way." As many as a thousand carts and pack-horses streamed into the markets every day. India especially sent precious stones, pearls, drugs, and spices; and among the things from the provinces came wonderful silks and brocades and delicate gold tissues.

Great paved roads ran from Peking to the provinces. All along them, twenty to thirty miles apart, stood luxuriously appointed post-houses, intended primarily for the use of the Khan's messengers and envoys from foreign parts. But traders often manœuvred a journey under ambassadorial protection (as the Polo brothers did on their first journey) and used the post-houses too, and the court, anxious to encourage the traders, winked at the custom. Four hundred horses stood in readiness at each station, and there were staffs of servants there not only to serve the inn, but to cultivate the ground round it and to attend to road repairs. Villages soon grew up round the inns. The roadsides were planted with trees where the country through which they passed was sufficiently fertile. The Khan's astrologers had told him that the Creator rewarded the tree-planter with long life. The trees served the useful purpose of marking the road in winter when the country was under snow. Where the road passed through desert country, or over rocky mountains, stones and columns took the place of trees.

I should like to be able to travel with you, guided by Marco, over some of these great roads, and see the people busy with their many occupations. Among these was the art of weaving, in which they excelled.

The province of Yang-chow-fu, where Marco had acted as governor, was engaged in the manufacture of arms. Salt-manufacture, sugar-refining by a method taught by a visitor

from Cairo, and horse-breeding occupied other provinces. There were whole towns inhabited by Nestorians or by Mohammedans. The great rivers were loaded with merchandise. The Yellow River, which Kublai had traced to its source "in the territories which belonged to Prester John," had its busy river port, a mile from its mouth, where fifteen thousand vessels stood in readiness to transport troops. We might visit too the Kiang river, with its isle in mid-stream called the Golden Mountain and crowned with monastery, palace, and pagodas. We might converse with the physicians and learned men, disciples of Confucius in the wealthy city of Singui, as Marco spelled it (Su-chow, City of the Earth), a city built upon canals—an eastern Venice—but we must be content with the description of the great city of Southern China, Kinsai, which we cannot very well pass by.

The real name of Kinsai was Hang-chow, as it is to-day. Kinsai was a descriptive name meaning Heavenly (or Celestial) City. It was the capital of the old Emperors of Southern China, whom Kublai had ousted. Ning-Po was its harbour, and it did an enormous trade. To this port, and to the port of Zaiton (farther south) especially, came the merchants of India, loading up from Zaiton with a cargo of the famous porcelain, manufactured there from clay refined in wind and weather for thirty or forty years. In Kinsai great warehouses bordered the river and canals to accommodate foreign merchants and their merchandise. There were three market-days in the week, and a tenth of all the wealth amassed there went to the Khan. Magistrates who dealt with disputes between foreign merchants, and who controlled municipal affairs generally, had their quarters overlooking the market-squares. There were no less than ten market-squares in the city.

Along the stone- and brick-paved streets stood the mansions and gardens of the rich artisans and craftsmen. It was a law in China that a son should inherit his father's trade, but the rich artisan was allowed to employ others to do the actual work. Physicians had their Harley Street, and astrologers too their own quarter, where, in addition to issuing predictions about the weather and fortune-telling by the stars, they taught reading and writing and "many other arts." They were a wary body of men, and wrote at the foot of their predictions, "God may do more or less than we predict."

Public baths, the garrison, abattoirs, hospitals for the poor

(founded by the old Emperors of China), each had its appointed place. In every street stood a fire-tower manned by guards day and night—a necessary precaution, for many of the houses were built of timber. On numerous bridges a covered guard-room housed the watchmen whose duty it was to sound the curfew (no domestic fires were allowed after dark), and, timed by their water-clock, to strike the hours upon a gong. On every door hung a tablet upon which the householder wrote the names of the members of his household, so that the authorities could take the census; and every innkeeper submitted to the magistrate's office the daily entry from his visitor's book, in which he kept a record, as the hotel-keeper does to-day, of the names of visitors and the dates of their arrival and departure.

Every one had an air of prosperity in this busy town. Most of the population could afford to clothe themselves in silk; and after the day's work was done covered carriages filled with pleasure-seekers bowled along the streets, and gaily decorated barges on the lake were filled with happy parties.

All these things and more you must read for yourselves. We may not spare more time here for Marco, although his book is so fascinating that it is difficult to leave him.

It was from the port of Zaiton (Tsuen-chow-fu) that the Polos eventually took ship and sailed to Ormus, the famous junction and trading town at the entrance of the Persian Gulf, *en route* for home. A happy accident enabled them to release themselves from the Khan's service without unduly hurting his feelings. The Mongol ruler of Persia, Kublai's great-nephew, wanted a bride from his own people, and the Polos petitioned to be in the escort of the princess chosen for him. The Khan reluctantly consented. The year was 1292. The Khan was old and ill, and for this reason, if for no other, it was expedient the Polos should get away. In the event of his death his successors might not suffer Western people gladly, and unrest in the far territories of the empire might make travelling perilous. Already the western Mongols along the usual land route were in rebellion, and the Khan decided that the journey would be made more safely by sea. At last the "tablets of authority," the gold plate bearing the imperial passport, lay in the Polos' hands, and a fleet of thirteen junks anchored in port. The junks were four-masted vessels, built of fir two planks thick, with fifty or sixty cabins. Some of them had watertight compartments. They carried boats for bringing

supplies on board, laying out anchors, and for fishing. They also carried tenders for towing, and each junk had a crew of two to three hundred men (four men to each oar). The princess and her ladies were on board, and the Khan sadly bade his favourites farewell.

Six hundred of the company died on the voyage, which gives you some idea of the suffering on even the best of ships in those days. It was many centuries before the awful death-rate at sea became appreciably less. The Polos delivered the princess safely at the Persian port only to discover that the would-be bridegroom was dead. But his son received her. He gave the Polos a Persian guard to see them through the unsettled territories, and they arrived safely at Trebizond, on the Black Sea, and from thence took ship to Venice. The Polos were so much altered by travel, hardships, and long absence that their Venetian kinsfolk did not at first recognize them; but this stand-offish attitude altered when the returned wanderers began to rip open the seams of their garments and showers of precious stones tumbled out.

Venice was at war with Genoa, and the Polos found their relations engaged in equipping a galley, an obligation upon every rich citizen. Marco sailed in command of the family galley, and was taken prisoner in September 1296. In prison at Genoa he dictated the story of his travels to a Pisan fellow-prisoner. He was three years in prison; then he returned home, married, and lived happily ever after. They called him Marco Millione, 'Marco of the Millions,' because in telling his stories of China he used such huge figures to describe her riches and the extent of her territory. The last we hear of Marco is that he has been fined for not calling in the plumber to mend his water-pipe.

Kublai died in 1294, shortly after the Polos' return; and though China gradually developed resentment against the Western invader of her secrets, and eventually closed her doors to the foreigner as far as she was able, the Polos were by no means the last visitors of importance. For fifty years missionaries and ambassadors went backward and forward. The first established preacher of Roman Catholicism, the Franciscan Friar John de Monté Corvino, reached Cathay in the beginning of the fourteenth century, and, though Kublai's successor was a firm Buddhist, he allowed Corvino to erect a church opposite the royal palace itself. Corvino converted a prince of the family of Prester John, as he believed, and made

many converts among the Nestorians, whose heresy and low level of understanding had done so much harm to the Christian cause.

Another Franciscan, Friar Odoric, was also among the missionaries sent to the East early in the century, and he wrote an interesting account of his outward journey *via* the shrine of St Thomas in Madras (according to tradition, St Thomas was the first resident preacher in India), and thence by junk to Sumatra and Java and on to China, and of his homeward journey over land through Tibet and Persia. A contemporary of Odoric, Francesco Balducci Pegolotti, wrote a famous merchants' guide-book to the East. He was in the service of the Bardi family of Florence. A Franciscan mission maintained a factory at Zaiton on behalf of Genoese merchants. John Marignolli, a nobleman of Florence who entered the Franciscan Order, headed a mission to China in 1339 as a result of a Tartar embassy to Avignon the year before. (The Popes were in exile in Avignon for some years, and virtually prisoners of the King of France.) His geography is confused. For one thing, he believed the Garden of Eden was in Ceylon, where the footprint of Adam, so the legend ran, upon Adam's Peak had lain indelible since the expulsion from the Garden. He tries to be accurate, however, and repudiates such travellers' tales as of dog-headed men and men with one foot so big they could hold it up and shade their heads with it. He numbers the "ypopotamus" among the animals he discredits. One must confess it is an unlikely beast. Some one who ought to have known better told him that fully half the ocean was unnavigable. He gives us many interesting sidelights on the East. He tells of the Christians of St Thomas in India who owned pepper gardens, and were masters of the steel-yard.¹ He was plundered of his treasure by the Mohammedan usurper in Ceylon. He examined an old tower in Bagdad, which he believed to be the Tower of Babel, and he brought home as a souvenir a piece of bitumen which he broke from the building, thereby proving himself the complete tripper. He spent a winter at the court of the Mongol lord of the Golden Horde on the Volga, crossed the steppes, and, having reached China, built a church near Pekin.

Early in the fourteenth century, too, a Venetian, Marino Sanuto, in an endeavour to reinspire the true Crusading spirit

¹ Probably the public balance, or scales, used by the people.

and avoid the persistent scandal of trading with the infidel, drew a map, and wrote a manual describing the trade routes and showing how the Christian might travel and trade without being dependent upon the Saracen. His description of the trade routes was very valuable, but his attempt to make trade the handmaid of religion met with cold response.

The last Mohammedan traveller of any note flourished in the first half of the fourteenth century, and it was said that he knew China as well as his native Morocco. His name was Ibn Batuta. He too wrote a guide-book, which naturally enough contained trustworthy information about North Africa, including some account of Timbuktu. This city was later forbidden to Christians, and awaited the nineteenth century before a courageous European gained admittance.

In 1368 revolution in China finally expelled the Tartar dynasty, and the dynasty of the old Emperors of China returned. Toleration towards the foreigner ended, and it was not until Europe found her way round by sea that the Far East reopened direct intercourse. Even then it was a jealous intercourse. Meanwhile Europe had to depend upon Venice, which was on good terms with the Mohammedan authorities and acted as middleman.

You may think I have turned aside for rather a long time to tell you about medieval China. I have done this because when I was at school nobody told me a word about it, and even to-day it does not seem that people hear very much about this fascinating subject.

CHAPTER XII

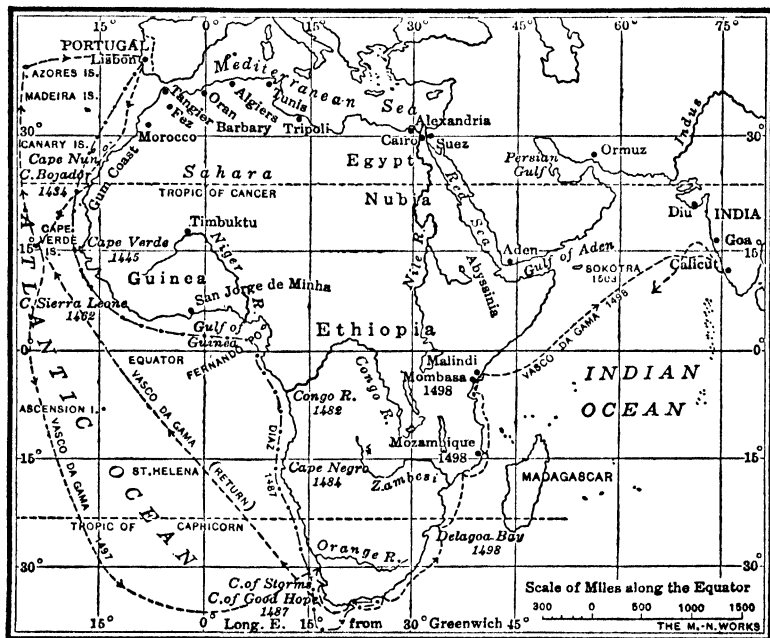
MORE VENTURES AT SEA AND A PRINCELY NAVIGATOR

WHEN the Polos returned home the Genoese were talking of other things besides the war with Venice. They were talking boldly of trying to get round Africa to India. As early as 1270, the year before the Polo brothers set out with Marco on their second journey to the East, a Genoese, Lancelot Malocello, had sailed into the Atlantic, and reported the discovery of land which men believed must be the Fortunate Isles of the ancients. Besides this, there was a famous alchemist, a Majorcan named Raymon Lull, or Lulli, who was confident of the existence of a passage round Africa to India, and there were others who agreed with him. Also some time while the Polos were still away two other Genoese pilots, Tedisio Doria and Ugolino de Vivaldi, set out in the hope of finding Malocello's isles again, and perhaps the way to the East. They got as far as Cape Non (or Nun) and possibly to the Guinea coast. Nobody heard anything of them more; their two little galleys sailed away into space and disappeared.

But the isles were not to be lost again. The voyage of Hanno the Carthaginian along the west coast of Africa centuries before would soon be surpassed. There were slave-raiding pirates on the Barbary coast of Africa, and Arab traders, men knew, were jealously guarding overland trade routes to the west coast. If Christian traders wanted African slaves—which they did—they were obliged to buy them from Arab middlemen. More, there was gold on the west coast. In the map which he had made for King Roger of Sicily Edrisi had marked "Bilad Ghana," the Land of Wealth, the Ghana which Europeans afterwards corrupted into Guinea. All these things were simmering in men's minds, and the traders, baulked of much of their activity eastward by the disturbances between Turk and Mongol, and between Mongol and Mongol, bethought them of mending their threatened fortunes by turning westward.

For some time after Doria and Vivaldi disappeared nothing was done, or if it was no record of it remains. In 1334 the Pope bestowed the lordship of the Fortunate Isles upon Don

Luis, Viscount Narbonne, with the title of Prince of Fortune, but he was too hard up to make good his alluring title. Diniz, King of Portugal, was the first to organize a fresh expedition for the rediscovery of Malocello's isles. His fleet sailed in 1341. A Genoese piloted it, and it was manned by an assortment of Genoese, Florentines, Castilians, and others. They landed upon



PORTUGUESE EXPLORATION OF THE AFRICAN COAST

From "Medieval and Modern History," by Hutton Webster (D. C. Heath and Co.)

Grand Canary, and stayed there from July to November. They found the natives amiable and well-grown, clothed in dyed goatskins, and living in wood and stone huts roofed with timber. They grew corn and garden products. The fleet cruised among the lime- and palm-covered isles, but the peak of Teneriffe frightened them. It looked like a fairy fortress, and they dared not land there. The people of the several isles spoke different tongues. When the fleet sailed for home it carried away four natives and a cargo of island produce, among this a dye-wood, the bark of which stained red "like brazil," which had hitherto been brought only from India.

In 1346 a Majorcan made an attempt to find the "river of gold" on the west coast of Africa, but he was lost. In 1351 a new *portolano*, consisting of eight sheets, made by a Genoese for the Medici family at Florence, and known to-day as the Laurentian Portolano because it is housed in the Laurentian Library at Florence, plainly showed for the first time in history the three separate groups of isles off the west coast of Africa—Madeira, the Canaries, and the Azores. Ancient geography, transmitted by the Arabs, and the new ventures into this part of the Atlantic had together produced this map, a fine combination of ascertained truth and bold conjecture. Madeira was marked as "The Isle of Wood."

In 1375 another map appeared, produced by Catalans. It too marked the intriguing group of islands, and also, on the west coast of Africa, Cape Bujeder (Bojador it is spelled now—the Bulging Cape). There was no doubt that traders and slavers were bringing home information. In 1382 a Spanish captain named Lopez was sailing from Seville to Galicia, and was driven by storm right to the island of Grand Canary. He and his men made friends with the natives, and lived there some years, but their anxiety to get away and their attempts to send communication home, presumably by little free-lance trading ships, by Arab pirates, or perhaps by French fishing-boats, excited the suspicions of the natives, and they murdered the men. A stray message did eventually reach Europe, a message twelve years old; and it came to light about the time when the news arrived of another voyage to the islands undertaken by a Spaniard named Becarra. Through the port of La Rochelle these stories reached the ears of an impoverished nobleman, Jean de Béthencourt, and with a party of enthusiastic fellow-countrymen he set sail for the Canaries in 1402, intending to colonize. The adventure, though by no means without its trials, ended in success, and the first European colony was established. From Grand Canary Béthencourt visited Cape Bojador, seeking the "river of gold." Tales of the west coast grew.

Have you forgotten that all this time a lost colony had its being in Greenland, founded centuries ago by the Vikings? North America was so nearly within men's ken, and yet it still eluded general knowledge, whatever tradition the colonists cherished of their founders' early voyages. In 1349 Ivar Bardsen, a Norwegian, visited the colony. He was almost the

last to remember its existence. It was dwindling fast. Soon it would disappear, as, I imagine, the traces of other early adventures disappeared. When next a European sailed into Arctic seas he came into what he believed were virgin waters. A chapter of history had passed as if it had never been. This



PRINCE HENRY THE
NAVIGATOR

was not the last time such a thing would happen. Men of the eighteenth century will scour the Pacific for islands discovered by Portuguese and Spaniards a couple of centuries before. You will discover the miserable reason why when we come to the period.

Now a figure appears in the world of discovery whom some folk regard as a model of all the virtues—a brilliant, self-sacrificing, inspired man, a hero; and whom others regard more coldly merely as an able man with an eye to the main chance. He was an idol of his countrymen in his day perhaps, but with clay feet perceptible to the critical eye of our own time. We cannot now be sure of his motives, but he certainly led the forces of exploration in his day. The finest pilots flocked to his service, and the work they did was undeniably inspired by his controlling energy. This

man was Prince Henry, son of the King of Portugal, and known to history as Prince Henry the Navigator.

He was born in 1394, the third surviving son of King John of Portugal, "the King of Good Memory." Henry was one of a band of brilliant brothers. His mother was an Englishwoman, the daughter of John of Gaunt, and sister to Henry IV of England. Prince Henry first distinguished himself in the capture of Ceuta, the port on the north coast of Africa, immediately opposite Gibraltar. That was in the year 1415, the year of Agincourt. To have taken this strategic point from the Arabs was an enormous advance in the campaign against them.

Though a very young man, Henry already cherished ideas of national expansion. Portugal was in the same predicament as Phœnicia in ancient days. Her kingdom was a strip along

the coast, her neighbours were too strong for her, and it was natural that, with the Moor as her immediate danger, it was the Moors' property she concentrated upon. Greater ambitions followed. Three years after the capture of Ceuta the Moors attacked it, and Henry was sent to drive off the besiegers—a task in which he was successful. On his return the King appointed Prince Henry governor of Algarve, the southern province of Portugal; and at Sagres, the port of Lagos, situated near Cape St Vincent on the extreme southern point of the province, Prince Henry established his court. This was in 1419. From this point of vantage Henry planned to win the west coast of Africa, to make familiar the islands in the sea, and to trade and colonize and spread the Gospel. He was Grand Master of the Order of Christ, and if that did not prevent his dealing in slaves among his other commodities, it did save the slaves from further inhuman treatment once they had reached Portugal and baptism. He built an observatory for the study of the stars in their relation to navigation, and he gathered round him learned men, Arabs and Jews among them, who were distinguished in mathematical science, astronomy, and instrument-making, and of whom Master Jacome of Majorca was the chief. Needless to add, he sought out the most trustworthy maps and books of travel. While at Ceuta he had collected all the information he could lay hands on about the Arab trade routes in Africa, and people in his employ continually brought him more.

It was just after the capture of Ceuta that the Prince sent out his first expedition. He commanded João de Trasto to visit Grand Canary, where Norman-French colonists had already established themselves. Two years later John Gonsalves Zarco and Tristram Vez, a couple of young men of the Prince's household, anxious to distinguish themselves, set out for the coast of Guinea. They were caught in a storm off Lagos and were driven to an island—an island lost to Europe since Roman times. They were so thankful to find anchorage that they called it Porto Santo, or Holy Harbour. Later they captured a vessel, and found on board an old Spanish pilot named Morales. He had been ransomed from the Arabs and, with others who had been Christian prisoners, was making his way home. There must have been much to say on board about Porto Santo. What could it be? Morales told Zarco and Vez a story he had heard about a new island. Was this Porto Santo?

They soon took the tale to Prince Henry, who swore them to secrecy in case others should be before them, and sent them out again at once with colonists. A companion went with them, Bartholomew Perestrello, and Morales acted as pilot. After they had arrived at the island of Porto Santo they were looking out to sea one day, and saw the dim shadow of another island. They were soon hard on the track, and made a landing upon this island. They coasted round it, and saw forests and a great plain overgrown with fennel. They called that point Funchal (the Portuguese for fennel), and the island itself they named Madeira (the Portuguese for wood). They took possession of it in the name of King John, and went home to report.

In 1425 the colonization of Madeira began in earnest, with Zarco as "Captain Donatory" of the south part and Vez of the north. The first children born there were christened Adam and Eve. Their surname was Ferreira. The colonists began to build the town of Funchal. They planted sugar-canes and vines, and exported timber and wheat and dragon's blood. (The dictionary describes dragon's blood as "a bright red gum issuing from a kind of palm-tree.") Zarco destroyed an enormous amount of timber by starting a fire in order to make a clearing. It got out of control and burned for years, a beacon to ships at sea.

Thus we have two groups of Atlantic islands, the Canaries (Malocello's rediscovered isles) and the Madeiras, at last explored and colonized and set upon the map for good and all.

Now comes the turn of the third group, the Azores. In 1428 Prince Pedro the Traveller, Henry's elder brother, brought back from Venice a map of the world and a book. The book was Marco Polo's travels, and on the map, as on the Laurentian Portolano, the Azores were indicated. (The Azores are named from a word meaning 'hawks.') In 1431 Gonsalo Velho Cabral (do not confuse him with the Cabral whom you will meet later) and Diego de Seville were sent to look for them. They found some of the isles of the group, which they called the Formigas (Ant Isles). In 1432 Cabral went out again and added St Mary to his bag. Birds were the only inhabitants. Prince Henry rewarded him by making him Captain Donatory of St Mary, and by giving him charge of the first scheme of colonization. He settled down there in 1436.

It was some years before all the isles of the group were discovered. One day a runaway slave, hiding upon a peak on St Mary, saw land in the distance. He had the wit to realize that to report new land might mean his acquittal. He was right, and in 1444, on St Michael's Day, the isle of St Michael was added to the list. Terceira followed the same year. The captaincy of this isle Prince Henry gave to a Fleming in his service, Jacques de Bruges.

All the isles were found in Prince Henry's lifetime, but there is no record of when the remaining events took place. In 1466 the King of Portugal gave perhaps all the islands, and certainly Fayal, to his aunt, the Duchess of Burgundy. In 1490 a Flemish knight, Jobst de Heurter, Lord of Moerkerke, went out to Fayal as Captain Donatory.

While all this work had been going on among the islands progress was made down the coast of Africa.

The first difficulty was to exceed the feat of Vivaldi in 1291 and double Cape Bojador. Several attempted it, and at last in 1434 Gil Eannes succeeded. The next year he went out again with the Prince's cupbearer, Affonso Baldaya, and they reached a point 150 miles beyond the cape. They sailed in a 'varinel' an oared galley, the largest vessel sent as yet upon this quest. The ships found they had to stand out to sea on account of the dangerous breakers on the coast. During the two following years Baldaya reached Rio d'Oro, but, alack! found no gold. He brought back a cargo of skins and oil. He thought he had reached the Senegal, the "river of gold." Mariners now felt happier. Nobody had turned into a black after passing Cape Bojador, as they had fully expected; and nobody had met a sea-serpent, nor been dragged down into the depths by an avenging jinn, resentful of their curiosity. Prince Henry, firm and tactful, with a finger upon his charts, bore down the superstition of ignorant seamen, and ever encouraged his officers.

His father, King John, died in 1433, but Henry's brother, who succeeded, gave him every support. Unfortunately his brother died within five years of his succession, and the heir, Alfonso V, was a minor. The Prince's energies were rather distracted for a time by affairs of State. He was not able to renew the search until 1441, and then his young chamberlain, Antam Gonsalves, went out with a friend as young as himself. They were impatient of the usual cargo of oil and what not,

and made up their minds to capture some natives, especially as they knew the Prince was eager for such captives. They discovered the direction of the caravan route, and knew that men with merchandise must come along some time. They planned a surprise. They pounced upon an unfortunate naked Moor, but he was armed with a spear, and had the courage to defend himself. He was inevitably captured. A woman then suffered the same fate. Now the ship was joined by another, commanded by a blithe young courtier, Nuño Tristam, who came with express orders from the Prince to bring home captives. Gonsalo de Cintra, yet another fire-eating young squire, anxious to please his master and his own vanity, added his enthusiasm to the party, and between them, after a free fight, they procured their prisoners, with a native chief among them. Gonsalo returned to Portugal. Tristam careened his ships and went on. He reached Cape Blanco (its white sand was the source of its name) and Arguin, and landed, nosing about for more captives. None appeared, so he too returned.

In 1443 and 1445 Tristam returned to Arguin, and found islands in the bay. He managed to reach Cape Palmar, and was relieved to discover the sea was not on the boil yet. In a subsequent voyage de Cintra was killed while slave-raiding upon the Arguin coast. This tragedy led to the dispatch of an armada to avenge him—thirty ships commanded by one Lancarote, royal customs officer at Lagos. Tristam Vez joined up from Madeira. Zarco sent a nephew, and two members of a distinguished family of sailors, Diniz and Lawrence Diaz, were there. Cape Blanco was made the rendezvous, and most of the Prince's hardened captains put in an appearance or were represented by younger relatives. The natives paid dearly for their audacity in defending themselves against Christian slave-dealers. After the punitive part of the expedition was over the captains separated, some to go home, some to remain—still slave-raiding—some to go on. Diniz Diaz on this voyage named Cape Verde after its evergreen trees and its grass.

So the ships came and went, gradually getting a little farther round the African coast, and in the process succeeding in stirring up the natives against all white men. Nuño Tristam and many others eventually met their end from poisoned arrows.

In 1445 a Venetian, Luigi Ca da Mosto, took service under Prince Henry. He was a trader, and made a profit-sharing

agreement with the Prince in which the Prince, to my mind, got much the best of it, for, profits or not, the trader had to bear the expense of the voyage. Ca da Mosto was full of confidence, not without reason. He knew well what he was about. He first visited Madeira, where he found the vines the chief interest of the colonists. Then he went on to the Canaries, seven isles of which he found cultivated. The natives there were less advanced than at Madeira, for they still went practically naked. He then crossed to Arguin, where he found the Arabs ready to trade with silver and gold and slaves and cloth. Prince Henry had already caused a fort to be built there, and the Portuguese fleet paid an annual visit. He cruised on to Senegal. He knew of a gold market a little inland, of the trade in salt, and of the great trade route through the interior to Timbuktu. He sailed some way up the river and traded. At Cape Verde he turned back. The natives there were completely out of love with Christians, who they supposed ate human flesh, since they carried off their fellows in such numbers.

In 1446 Luigi made a second voyage. He reached the Rio Grande (Gambia), which was the most southerly point yet attained.

Nothing further of importance happened before the death of the Prince, which occurred in 1460. He sent out his last expedition under Diego Gomez in 1458. Gomez traded up the Gambia, and gathered more information about the caravan routes and the prospects of gold. War in Africa then called a halt to the Prince's sea ventures.

In 1459 Fra Mauro, a Venetian monk, who had spent three years in making an immense map of the world, completed his labours. The map was the high-water mark of map-making up to his own time. In the map were incorporated the results of the Prince's expeditions.

From the middle of the fifteenth century onward big, sea-going ships had three masts and five or six sails. There had been little change in ship-construction between the eleventh and fourteenth centuries, during which period the single-masted, one-sailed, clinker-built ships were almost universal. A large ship built at Bayonne for Henry V of England was 186 feet long and 46 feet wide; an Italian merchant galley of the same period was 125 feet long and 34 feet wide.

CHAPTER XIII

FIFTEENTH-CENTURY VENTURES

WHILE Prince Henry was still alive a great event cut across the interests of Europe. In 1453 Constantinople fell to the Ottoman Turk, and fell not to be recovered.

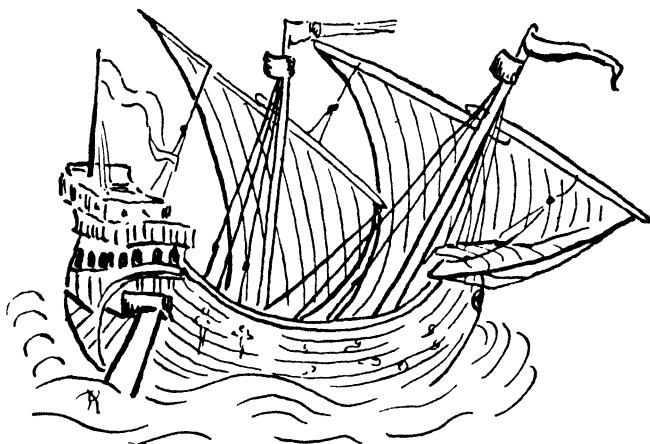
The Ottoman had won his first stronghold in Europe when he took Gallipoli in 1358. Constantinople had long withstood the threatening Turkish advance, but the Greek remnant of the ancient Roman Empire had been rapidly failing. From the eighth century onward the Eastern Empire had had to contend with hordes of nomads sweeping into and across her territories, and though the Emperors had held on, their grip steadily loosened, and bit by bit their possessions fell from them. Now the Turk had torn his way through, and the last thread had dropped from the tattered purple, once so proudly worn by Roman Emperors.

Apart from the alarming prospect of the Turk in Europe, his conquest was a menace to trade. The conqueror, Mohammed, expelled the Genoese from Constantinople. They themselves some time before had engineered, through the Emperor, the expulsion of their Venetian rivals. But both Genoa and Venice still held coast port possessions and islands off the coast, which they would continue to hold with varying fortune for a little while yet. Venice already had permission from the Pope to engage in free trade with the infidel in Alexandria, Cairo, and Syria, and she now hastened to make a treaty with Mohammed. This self-centred attitude on the part of Venice was one of the stumbling-blocks to an united attack upon the Turk by Western Europe. Later on, when the Sultan made an attack upon the Venetian possessions, Venice made a further treaty, and agreed to pay a subsidy for the right of free trade in the Ottoman Empire and for the presence of her consul in Constantinople. It was not until the great ocean routes to the East were discovered, and direct trading with the East established, that as a middleman she was finally put out of court.

The overland routes to the East had for some time been practically closed to the Christian traveller. As long ago as 1444 a Venetian nobleman, Niccolò de Conti, had returned

after twenty-five years of travel in the East, during which he had visited India, Ceylon, Sumatra, Java, and Southern China, and had been obliged to renounce his faith on the way in order to save his life. Soon the Red Sea would be closed to Christian traffic altogether.

As time went on one or two of the Popes made ineffectual efforts to rouse Western Europe to the rescue of the eastern kingdoms and duchies at the mercy of the Turk, but jealousy,



TURKISH SHIP OF THE FIFTEENTH CENTURY

From "The Sailing-ship," by R. and R. C. Anderson (Harrap)

preoccupation with other affairs, and every kind of intrigue prevented anything but a lukewarm response. The Bishop of Siena (who became Pope in 1458) wrote to Pope Nicholas V:

Mohammed is among us. The sabre of the Turks waves over our head; the Black Sea is shut to our ships; the foe possesses Wallachia, whence they will pass to Hungary [a true prophecy] and Germany. And meanwhile we live in strife and enmity among ourselves. The Kings of France and England are at war; the princes of Germany have leaped to arms against one another; Spain is seldom at peace, Italy never wins repose from conflicts for alien lordship. How much better to turn our arms against the enemies of our faith! It devolves upon you, Holy Father, to unite the kings and princes, and urge them to gather together to take council for the safety of the Christian world.

But it was beyond the power of any one man to compose the princes of Europe, and all the Pope could think of was to issue

a Bull imposing a tax and a five-years truce upon the princes of Christendom, that they might have the time and money to march against the infidel. As far as I know, nobody paid the tax, and if the princes entertained any idea of marching against the infidel it was only for the sake of dividing the prospective spoils between them. The Hungarians and the Albanians were left to bear the brunt of the Turkish onslaught. Naples had a bad fright in 1480, when Mohammed took advantage of the fact that Naples and Florence were at war, and crept across the Adriatic, actually landed upon Italian soil, took Otranto, and sawed in two the archbishop and the commander-in-chief—a method of intimidation popular with the Turk at the time. Venice stood by and watched. She was even suspected, always with an eye on her trade, of inviting Mohammed to obtain the title of Roman Emperor. Happily, before he had consolidated his conquest his attention was drawn off to the Knights of the Order of St John, to whom belonged the island of Rhodes, and, even more happily for Italy, he died. The knights managed to hold on to their little outpost (not only, I fear, by the force of Christian courage), until the Sultan Solymán the Magnificent turned them out in the next century.

Through all this period of political and national intrigue there were men who never turned their thoughts from the practical endeavour of reaching the East by sea, and the closing of the old routes only served to increase the concentration of navigators upon the Atlantic. When Alfonso of Portugal grew up he took a vigorous interest in the expansion of his domains. Misled by inaccurate geography, he cherished the notion of linking up the west of Africa with Abyssinia, a so-called Christian kingdom. He believed the Senegal to be a branch of the Nile. He proposed to traverse Africa by this water-way and to launch Christian ships into the Red Sea itself. The idea of finding a route round the south of Africa was also taking a stronger hold. Both Venetian and Genoese pilots sailed in Portuguese ships, and were interested in such speculations, though their native towns still clung to the hope of renewed facilities along the old channels of trade.

In the year of Prince Henry's death King Alfonso sent out Diego Gomez on a voyage of discovery and trade, and he found the Cape Verde isles. This was a real discovery—not, as far as we know, a rediscovery. He landed on an island which he called Santiago (St James), because it was on that saint's day

he arrived there. Doves and turtles were the only inhabitants. On his way home he caught a countryman smuggling arms to the Moors. He took him home, where he was tossed upon the fire, his sword and his ill-gotten gains with him. The next year the colonization of the Cape Verde Isles began. The same year the King sent a certain Pedro da Cintra in the wake of Ca da Mosto's farthest south, and he reached the Bight of Benin. Ten years later Fernando Po found the isle which bears his name, and in the same year Martin Fernandez and Alvaro Esteves crossed the equator. On a second voyage, in 1475, these men beat their own record and reached Cape St Catherine.

King Alfonso went the way of all flesh, and King John II ("the Perfect") reigned in his stead, and still the little caravels pegged away. In 1481 King John sent out a fleet under Diego de Azumbuga. With this fleet sailed a new recruit in the King's service, Cristoforo Colombo (Columbus). The ships carried for the first time stone pillars in place of the wooden crosses used hitherto to mark the navigator's attainments and to denote their sovereign's rights of discovery. They repaired the fort at Arguin—built a fort and a church at La Mina, and procured a fine cargo of gold and slaves. In 1484 Diego Cam reached the Congo, and the following year Walvisch Bay. The Congo natives sent an embassy to King John, and there was much talk of conversion. The Congo natives had tales of a prince in the interior who, from Cam's account of Christianity, they judged must be Christian in spirit, if not in actual creed. The news caused some excitement. Were the explorers really on the track of Prester John at last? Prester John in popular belief was now firmly domiciled in Africa, so involved had inaccurate geography become. King John made elaborate plans which launched the first of the famous long sea voyages.

He arranged four different lines of investigation. One party was to sail round Africa, make contact with Prester John, and then continue exploring as far as possible. Another was to go overland to Palestine, Egypt, and Arabia, and seek information from the other end. Another was to go up the Senegal "to its junction with the Nile"; and yet another was to essay the North-east Passage and endeavour to reach Cathay.

The two parties who had the greatest measure of success were the one sailing round Africa and the one sent overland. In August 1486 Bartholomew Diaz sailed in command of the two little fifty-ton ships which were to herald the greatness of

Portugal and the dawn of a new era. Overland went Pedro de Covilham and Alfonso de Payra. They both spoke Arabic, and travelled as merchants. They reached Cairo *via* Alexandria, and there they separated, Payra to gather what information he could and then go on to Abyssinia. He presently died, and so drops out of the story. Covilham took caravan to the coast, and from there a Moorish ship carried him to Calicut, on the Malabar coast of India. From Calicut he recrossed the Indian Ocean to Sofala, on the east coast of Africa, one of the great Arab trading towns. He gathered information all the way. You remember what he would hear at Sofala: how the Arabs had traded down the coast for several centuries, how they went backward and forward to India, and how flourishing their coast towns had become. He was in the midst of this busy coast trade. He heard of Madagascar (so long ago indicated by Marco Polo), which the Moors called the Isle of the Moon. From Sofala he returned to Cairo, and received dispatches from King John. The King's messengers were Rabbi Abraham of Beja and Joseph of Lamegon, whose knowledge of Bagdad and Ormus had recommended them to the King. They told Covilham of Payra's death. Covilham and the Rabbi then set out for Ormus and Aden, whence the Rabbi returned to court with reports. Covilham set out for Abyssinia to complete the work which Payra's death had left undone. He never got away from the Abyssinian court. His fate was the fate that had almost overtaken Marco Polo, but he kept in continual communication with King John. He had met learned doctors among the Arabs who spoke of some passage round Africa, and even saw a chart which marked the Cape of Good Hope. "Let the Guinea ships," wrote Covilham, "sail on, and seek the Isle of the Moon and Sofala." "Keep south," he wrote; "Africa must end!"

Meantime Diaz was battling round Africa. He rounded the Cape, and reached the mouth of the Great Fish River, some way beyond Algoa Bay on the south coast. The Agulhas current set against him, and his crew, already exhausted, refused to go farther. He put up his last pillar on the coast of Algoa Bay, and sailed for home. The great goal, the long-dreamed of sea route round Africa, is almost won. Only little more than a decade will pass before the conquest is complete.

Between Diaz's return and the voyage of his great successor,

Vasco da Gama, another discovery, greater than his, took place. Columbus reached the fringe of the Americas. This event, coupled with the Portuguese discovery, changed the whole complexion of European affairs.

Columbus sailed in 1492, and in January of that year another outstanding event took place. Granada fell, the last stronghold of the Moor in Spain, and left Spain unshackled to stand among her peers in Western Europe.

Before we follow Columbus to the New World and Vasco da Gama round the Cape of Good Hope let us glance at the continent they left behind them. The last quarter of the fifteenth century witnessed many memorable developments. The Renaissance, the rebirth of classical learning, was in full flower in Italy; its influence was not felt in France till later on, and in England not for another thirty or forty years. The art of printing was becoming known. The introduction of gunpowder was revolutionizing the ideas of military commanders, as its use rendered obsolete the steel-clad horsemen who had been the shock-troops of the medieval army. The Plantagenet dynasty had ended with the death of Richard III on the battlefield of Bosworth in 1485, and the Tudor dynasty was established on the throne of England. In France Charles VIII, the long-nosed, feeble-bodied, but ambitious successor of Louis the Spider (Louis XI), was seeking gain and glory by reasserting the French claim to the kingdom of Naples and the duchy of Milan. Great dynastic and national changes were foreshadowed by the marriage of the daughter of Ferdinand and Isabella of Spain with the son of Maximilian of Austria. Maximilian's wife Mary had been the daughter of Charles the Bold of Burgundy, that duke as rich and powerful as any king, who had recklessly pitted his slow-moving brains against the subtle wit of Louis the Spider. Through this marriage the Habsburg dynasty ultimately came to rule over Spain, Austria, Hungary, the Netherlands, and the New World discovered by Columbus.

It was not only in material things that men saw and felt



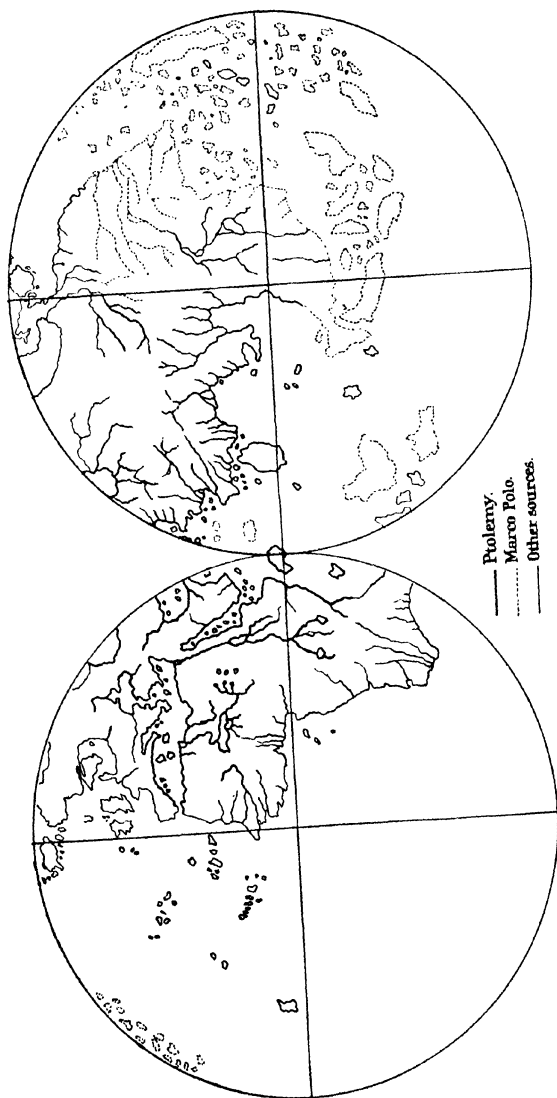
THE OLDEST-KNOWN
PICTURE OF A PRINTING
PRESS

striking new developments. The two greatest intellectual movements of our Christian era, the Renaissance and the Reformation, were born. Neither movement was of sudden growth—both had their roots in the thirteenth century. But it was at this amazing period of activity that they took shape and colour.

The Renaissance represented the ancient Greek culture, with its passion for philosophy and for beauty. The Reformation drew its ideas rather from the ancient Hebrews, with their austere zeal for righteousness. One tended to paganize men's minds: the other sought to refashion them in the Old Testament mould. Both were strikingly unlike the system of thought which the medieval Church of Rome had built up. In the succeeding century the Church of Rome launched what is called the Counter-Reformation and remedied many of those abuses which had made the pagan sceptics jeer and the stern Reformers frown: but she acted too late to prevent large bodies of her former adherents from breaking away and setting up rival sects of their own. So the Protestant countries of Europe took on their characteristic colour, and attained a separate religious and political existence.

There were two outstanding figures in the infant science of geography. A Florentine, Paolo del Pozzo Toscanelli, and a German, Martin Behaim of Nuremburg. Martin Behaim is remembered principally for the globe he made in 1492, known to us as the Nuremburg Globe. Its principal virtue is that he made some attempt to improve upon Ptolemy's geography by delineating the discoveries of Marco Polo and others. But it failed where it might have succeeded had he been better acquainted with the *portolani* of his own time. Interest in trade between Flanders and Portugal took Behaim to Portugal and to the court of King John II, where he acquired some reputation. He shared with the court physicians, Roderigo and Josef, the honours of improving the astrolabe, an instrument by means of which a mariner could discover his distance from the equator by measuring the altitude of the sun. In 1486 he married, and afterwards lived most of his time in Fayal, in the Azores. His work, as far as we know, had no influence upon future discovery, but Toscanelli's was a different story.

Toscanelli held pronounced views upon the subject of a western passage to Cathay. His masters were Aristotle and Ptolemy, and he had no doubt that the world was round, a



BEHAM'S GLOBE AND ITS SOURCES
 From "A History of Geographical Discovery and Exploration," by J. N. L. Baker (Harvard)

belief shared by most of the educated men of his day, though a great many of them believed that to voyage round the world was practically impossible. It would take too long, for one thing—no ship could carry enough provisions. He also believed in the existence of a legendary island, supposed to lie in the ocean between Europe and Asia. As early as 1474 he was in touch with the court of Portugal, and although the evidence that Columbus studied his work is not conclusive, it is very possible that he did so, especially as Columbus was at one time in the service of King John II. Toscanelli drew a map for the guidance of navigators who might search for the isle. Several important features of the map owed their origin to Marco Polo's work.

The history of the belief in the mid-Atlantic isle dates back a long way. From a time several centuries before Christ legend had it that there was a great island to the westward of Mount Atlas. Plato, the Greek philosopher of the fifth century B.C., made use of this legend upon which to hang some of his philosophical discourse. The island was called Atlantis in compliment to Mount Atlas. (The Atlantic received its name from the same source.) Possibly an early accidental discovery of one of the large Azores gave birth to the legend, and between that time and the time when the near Atlantic isles resolved themselves into solid fact other tales of voyages, half-reported and distorted, had got about, and the old legend held its ground. There was the tale of seven bishops who had fled Spain before Mohammedan persecutors, and, sailing westward, carried Christianity to an "Isle of Seven Cities." There was St Brandon, who sailed from Ireland westward and found an isle called "Brazil." There were the Norse sagas of Vinland (Wine-land), which, unacknowledged as historical fact, had filtered into men's minds. The island was confidently depicted upon several maps of the century, and Behaim sprinkled apocryphal islands over the Atlantic like sugar from a castor.

The Portuguese name for the island was "Antilha," which meant 'the land opposite,' and Lisbon sailors were instructed to be on the look-out. While Portugal sought Antilha, Bristol sailors pinned their faith to St Brandon and Brazil. They set out from Dingle Bay, on the south-west coast of Ireland, and sought the elusive isle in the more northern Atlantic.

There are authorities who believe that Columbus communicated with Toscanelli and that Toscanelli sent him a letter

and his map. Columbus was aware that Ptolemy and Marinus of Tyre, of whom I told you in his place, differed about the distance between the coasts of Europe and Asia. Men were considering both these ideas, and it was natural that a man anxious to make the farther shore should wish to trust to the shorter calculation and hope for the best. Columbus clung to it. He pointed out this difference of opinion when he wrote to Ferdinand and Isabella. His plan was to eschew any zigzagging after islands, and make a straight dash for Asia. Men also said that if land were found it would probably be uninhabitable, barren as the moon—or given over to monsters. But there was a difference of opinion about this too. Some believed it probable that there lay hidden fertile land, inhabited by normal beings and in all likelihood rich in minerals.

Such, then, was Europe and European thought when Columbus, pursuing his great idea, sought the patronage of some crowned head in Western Europe.

CHAPTER XIV

COLUMBUS

It is curious that we know so little of Columbus himself. Or perhaps it is not curious when we remember the age in which he lived. There were no such things in those days as dictionaries of national biography and newspaper reporters who could bring to light the smallest detail of a great man's career. Indeed, Columbus's contemporaries by no means overwhelmed him with honour. He had the greatest difficulty in finding a patron, and he died unhappy and neglected.

True, the sovereigns of Aragon and Castile bestowed high-sounding titles upon him, for which he was shrewd enough to bargain before he left on his first voyage, but they brought him little practical advantage in the end, and after his death his son was hard put to it to defend both his father's name and his own inheritance. So I cannot tell you very much about him himself. Such and such facts have been stated about him, but authorities are often not in agreement. You may read pages about his birthplace, his education, his seamanship, and how far he is to be credited with original thought in his plans for discovery; yet the only thing of real importance that emerges is the incontrovertible fact that in the course of four voyages he did discover the Bahamas, and sailed some distance along the coasts of Central America and of Paria, part of what is now Venezuela.

He was Italian, probably Genoese, the son of a wool-comber who worked in Genoa. He himself states that he went to sea as a boy, though he was not by any means all the time at sea. In 1476 he was with four Genoese ships which, on their way to England, were attacked by a pirate off Cape St Vincent. Two of the ships escaped to Lisbon, and Columbus was in one of them. They went on to England, and there is some reason to believe that Columbus went too. In 1478 he married in Portugal a lady above him in social status, whose father had been one of Prince Henry's navigators and the governor of Porto Santo, in the Madeira group. The next year he visited Porto Santo, and had the opportunity of examining the charts and papers which had belonged to his wife's father. Subse-

quently he offered his services to King John, and after accompanying Azumbuga's fleet in 1480 he broached the subject of a far more ambitious attempt to the King, nothing less than to strike out on to the high seas and make a dash westward for Cathay.

The King favoured the idea, but a council who deliberated upon it gave an adverse verdict. Then occurred an unbelievable act of meanness. The Bishop of Ceuta had the bright notion to suggest to the King that they should use Columbus's plan without his knowledge (possibly with the object of giving a Portuguese the opportunity of making the discovery), and a caravel was equipped and sent out. Fortunately for Columbus, the sailors mutinied and forced their commander to return. Columbus discovered the little game and was so disgusted that he left the country, determined to apply to the King of France. He went first to Spain, and was there persuaded to change his mind and to repair to Queen Isabella.

By this time we have reached the year 1484, and the final struggle with the Moors was engaging most of the attention of Isabella and Ferdinand, so it was not a very opportune moment for Columbus to apply to the Queen. As it happened, the Queen's council after due consideration reported the project wild. The princes of the Spanish Church also described it as infamous, irreligious, and profane. So Columbus was put off again, though he was given some contribution towards his living and was taken on as a officer of the Crown.

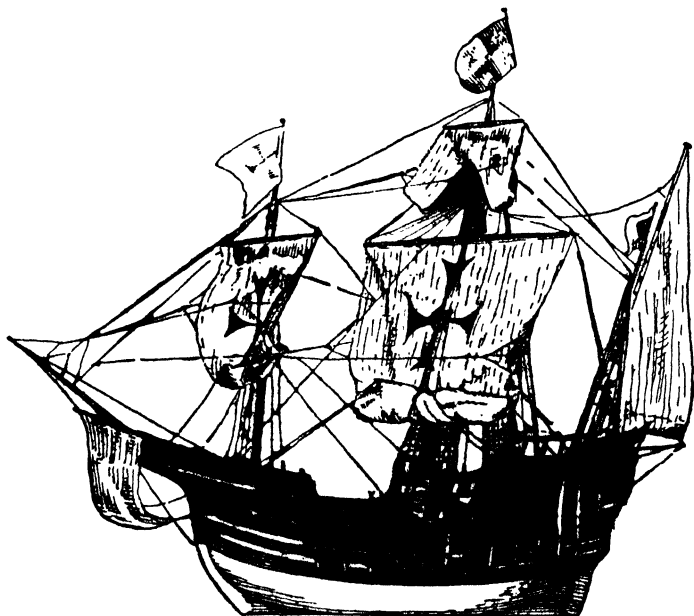
These delays went on for years, during which time Columbus sent his representative both to Henry VII of England and to the King of France. He also offered his services (with the hope of suitable reward) to Genoa. Genoa had firmer hopes of the old overland routes to the East. Venice, happy in the many advantages she already possessed, was equally uninterested. In the end he found a confidant and supporter in Queen Isabella's confessor. The story is told that Columbus arrived starving on the steps of the monastery of Santa Maria de Rabida, near Huelva, in Andalusia. True or not, a monument commemorates to-day the spot where he is supposed to have sunk down exhausted. The prior listened to his schemes and believed in them, and introduced him to his friend, the Queen's confessor, who wrote in urgent terms to the Queen. By this time Columbus himself had made up his mind to go off to France, and had actually set out, but he was brought back

from the seaport of Huelva with an order to attend the court at Granada. He was there when the town surrendered. The sovereigns found themselves at liberty to consider the schemes of this persistent would-be adventurer.

Columbus's principal qualifications for the command were an unbounded confidence in God and himself—than which none could be better, upon whatever adventure a man be set. He was so confident that the terms he demanded for his services caused negotiations to break down again. Columbus set out for France once more. Yet another friend intervened and prevailed with the Queen, who was the enterprising one all through the discussions. A messenger was sent post-haste after Columbus and brought him back. The sovereigns then signed the agreement. Some people think that Columbus, misled by a mistake on the part of Marco Polo, was hoping to find Japan and then to reach the east coast of Cathay.

Even now he could not obtain a crew to sail with him until two brothers of importance in the seaport of Palos, Martin Alonzo and Vicente Yañez Pinzon, took up his cause and decided to sail with him. At last, in August 1492, the tiny fleet got away. It was made up of three ships—the flagship, the *Santa Maria*, of a hundred tons, and two others, the *Pinta* and the *Nina*, of fifty and forty tons respectively. They made for the Canaries, where they took in wood and water, and from there they launched upon the unknown seas. During the long voyage into uncharted waters the crews became frightened and mutinied more than once. Columbus had to tempt them onward with promises of rich rewards. At last they saw some birds flying and some weeds floating and knew they were near shore. Then the look-out man on the *Pinta* shouted, "Land ahoy!" It was one of the Bahamas, probably the one now called Watling Island, and the date October 12. Columbus took possession in the name of the sovereigns of Castile and Aragon, and sent his officers inland to seek the Great Khan. He cruised about and found a group of islands, later known as Rum Cay, Long Island, Crooked Island, Cuba, and Haiti. He called them Maria de la Concepcion, Fernandina, Isabella, Juana, and Hispaniola. On Hispaniola the flagship went aground. From her timbers his company built a fort, which they called La Navidad—the first European settlement in the New World. Columbus left forty-four men in charge and sailed for Spain, where he was received with honour.

In 1493 he began his second voyage with three carracks (galleons) and seventeen small caravels, carrying colonists, missionaries, and animals. On the way to Hispaniola he sighted Dominica, Porto Rico, Guadalupe, Santa Cruz, Antigua, and several other islands. He arrived to find that La Navidad had been burned by natives who had fallen foul of his men, and



THE "SANTA MARIA," 1492

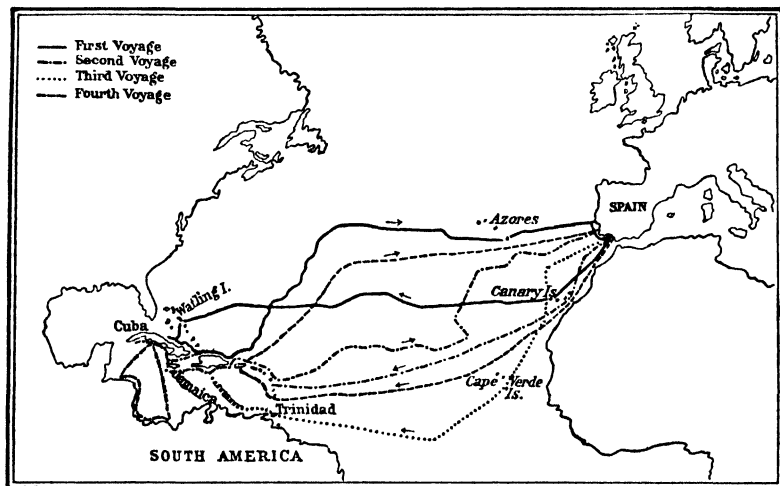
From a model in the South Kensington Museum

that the settlement had been dispersed. He cruised farther along the coast of Hispaniola, and founded the town of Isabella, and, not without trials, settled his colonists. No doubt glad to be rid of them for a bit, he set out to make further discoveries. He was ill when he returned to Isabella, and the colonists were more troublesome than ever. Moreover, they had upset the Indians. He returned to court in 1496.

Columbus set sail on his third voyage in 1498. It was then that, after landing on an island which he named Trinidad, he found the Gulf of Paria, and landed on the coast.¹ Thus he was the

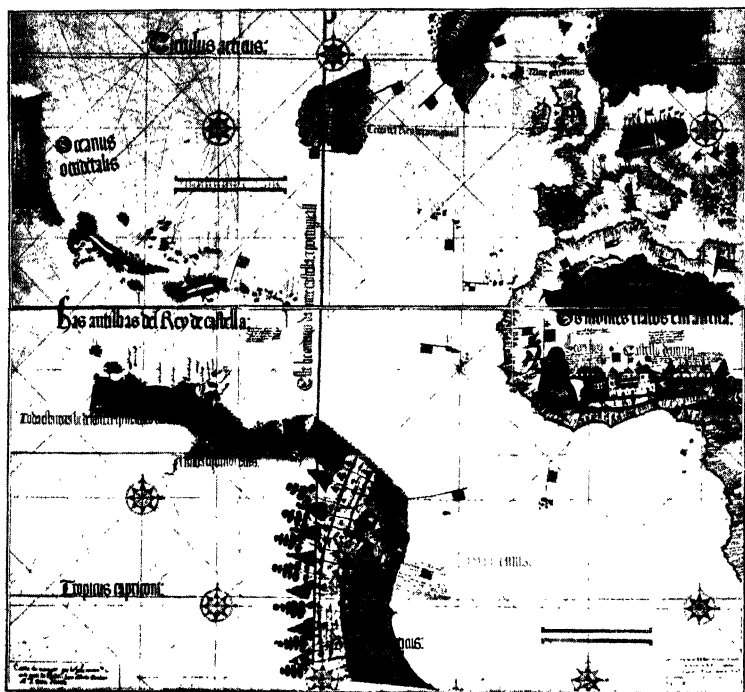
¹ It is open to question whether Columbus himself actually landed, but his men certainly did.

first, historically at any rate, to land upon the continent of South America. His colonists at Isabella quarrelled with him, and in answer to their complaints the Spanish Government sent out a new governor, who packed off Columbus and his brothers to Spain in chains. This violent treatment brought about a revulsion of feeling at court in his favour, and when he appeared there in December 1500 it was once more in honour. Another new governor went out to Isabella.



THE FOUR VOYAGES OF CHRISTOPHER COLUMBUS

In 1502 Columbus set out upon his fourth voyage, steering south from Jamaica. The sovereigns advised him not to touch upon Hispaniola, but one of his ships needed repairs, which left him no alternative. The governor refused help, and he had to go elsewhere. His crew threatened mutiny. On a little island off the coast of Honduras an Indian told him a story of rich land in the offing. He probably meant the Aztec Empire in Mexico, but Columbus immediately concluded he was on the track of the Great Khan at last. He cruised along the coast, enduring much suffering. The ships were rotting, and his men growing more and more threatening. He stuck to it, however, and reached Belem, and even determined to make a settlement there. That was too much for his crew. He was obliged to turn homeward. Two ships had to be abandoned. He reached Jamaica in June 1503, and there, as the last straw,



POPE ALEXANDER VI'S DIVISION OF THE NEW WORLD

This chart shows part of the line drawn by Pope Alexander VI to divide the unclaimed territories of the world between Spain and Portugal.

From a facsimile in the British Museum of the original in the Biblioteca Estense, Modena

ran his ship aground. The natives proved friendly, and Columbus, having sent a ship to Hispaniola for help, settled down to wait. He had a terrible time. He was ill himself, and his men behaved badly, upsetting the natives. In June 1504, after he had endured a year of this torture, the relief ships arrived, and in November he was home again. It was to hear that his special patron, the Queen, was dying.

Columbus entered upon two years of deferred hope, following the court about, and always being politely put off. The King at last showed his hand by offering him an estate in Leon in exchange for the privileges in the West Indies to which his original agreement entitled him. Columbus refused. When Philip of Burgundy and Joanna of Spain arrived to assume the crown of Castile he made another attempt, but the new sovereigns "knew not Joseph," and shortly afterwards, in May 1506, he died at Valladolid, impoverished and forgotten. Another and lesser man gave his name to the continent Columbus had discovered.

After Columbus's return from his first voyage an effort, amusing to us now, was made to prevent quarrels between Spain and Portugal. Pope Alexander VI issued a series of Bulls, to which Columbus's advice contributed, in which he suggested that those nations who now shared the honours of notable discovery should draw a line round the globe to mark their respective rights. This line should be cut through a hundred leagues west of the Azores. Portugal should retain unchallenged her monopoly of the African coast, and any further discovery as far as the division on the opposite side of the world, and Spain should develop in equal freedom the lands she discovered by westward sailing as far as the same division. After some debate Spain and Portugal settled the partition themselves on a meridian 370 leagues west of the Cape Verde Isles, midway between Portugal's Azores and Spain's West Indies. They cheerfully ignored any claims the rest of the world might be supposed to cherish, then or in time to come, and naturally their decision made little impression when English, Dutch, and French were fairly launched upon the ocean highways. As the French monarch remarked in effect, he had yet to learn that the Portuguese and the Spaniards were the sole heirs of Adam.

CHAPTER XV

SOME VOYAGERS CONTEMPORARY WITH COLUMBUS

I HAVE followed Columbus's fortunes to the end. Now we must go back, for other voyages of the greatest importance had taken place upon other routes while he was still at work; and other men whom we must discuss followed immediately upon his track.



VASCO DA GAMA

In 1497 the Portuguese Vasco da Gama set out upon his two-years voyage which won at last for the Portuguese their long-sought goal. He discovered St Helena Bay, in the south of the African continent, and fought the Hottentots, rounded the Cape in a storm, reached harbour in Mossel Bay (discovered by Diaz), and bartered for provisions; he sighted Natal on Christmas Day, and then reached the Quilimane river, where he careened his ships and rested his scurvy-stricken crews. After this fresh start the fleet made Mozambique, then Mombasa (where Mohammedan treachery nearly cost the voyagers their lives), and then Malindi. Here they shipped a local pilot, crossed the Indian Ocean, and arrived at Calicut in May 1498. Here again they went in danger of their lives, for the Mohammedans

excited the Hindus against them. Da Gama, however, managed to get an interview with the local king, and obtained from him permission to trade. He gathered but a poor cargo, so great was the resentment against the intrusion of Christian traders. He reached home, less a round hundred of his crew, in 1499. Portugal had turned the first page in the story of her colonial empire.

In the same year that Vasco da Gama sailed Giovanni Cabotta (John Cabot), a Venetian citizen (born a Genoese),

set out from Bristol under letters patent from Henry VII. By these letters he was given permission to sail from any English port at his own cost "to seeke out, discover and finde whatsoever isles, countries, regions or provinces of the heathen and infidels whatsoever they be, and what part of the world soever they be, which before this time have beene unknownen to all Christians." The presence of Cabot in England is explained by the facts that there was a 'colony' of Italian merchants in London, that Genoese held office at court, and that any number of Genoese and Venetian galleys traded to English ports. Cabot was in Venice in 1476, and Toscanelli was there in 1474, advocating his cross-Atlantic idea. Cabot must have known all about it. There is even some historical evidence that he visited Spain, either before Columbus or about the same time, to try to find sponsors for a transatlantic voyage. He was in England when Columbus made his first voyage, and the news of its success was in all likelihood brought by the Italian merchants, reaching the court, where there would be much talk of it. So we can imagine that King Henry was willing enough to permit Cabot's adventure, though he was careful enough to avoid contributing to its cost. Cabot sailed from Bristol with one ship and eighteen men, among whom were his sons. They landed on the coast of Labrador, which they called *Prima Vista* (First Sight), and then sailed south and discovered, or rediscovered if the Norsemen had preceded them, Newfoundland, and reported splendid fishing grounds. Cabot thought, as he hoped, that he had reached the land of the Great Khan. King Henry was pleased, and gave the discoverer ten pounds for his "newe found iland."

Cabot made another voyage the next year with five ships, meaning to make for "equatorial and southern lands," and sailed south from Newfoundland, possibly as far as Florida. The Portuguese declare that their countrymen, the *Corte Real* brothers, had found the "Land of Cod" already, and as early as 1463. Who knows? As one editor of old travels has remarked, "Truth flies out of the door when Patriotism comes in at the window." We have historical proof that the *Corte Reals* paid more than one visit there between 1500 and 1502, and they both perished in these waters. In 1498 a Portuguese dispatch reports that cod-fish are so plentiful they may be caught there "simply by diving a basket into the water." From 1501 both English and Norman fishermen were frequenting

the cod-banks, and apparently Breton fishermen reached them even earlier—how early we cannot be quite sure. The name Cape Breton probably recognizes the fact that theirs were the earliest fishery stations.

Soon both Spain and Portugal were sending abroad expedition after expedition. Many of these were financed by private enterprise, and those from Spain sailed with a licence from Bishop Fonseca, in whom the Crown vested its authority for this purpose, with the arrangement that the Crown should receive a percentage of the profits. In 1499 the captains were hard upon Columbus's heels. Several men who had sailed in his fleets now commanded expeditions themselves. Upon Columbus's report of pearls and other possible wealth on the coast of Paria and on the neighbouring isle of Margarita an expedition sailed to see what could be found. Alonzo de Ojeda commanded it; Juan de la Cosa, Columbus's chief pilot on his first voyage, a Biscayan, and a fine fellow, went as pilot; and they were accompanied by a Florentine merchant, factor at Cadiz for the great commercial house of the Medicis, whose name was Amerigo Vespucci—a name destined, quite undeservedly, to become perpetuated as the name of the new continent.

The expedition reached what is now Surinam, and landed on the islands of Trinidad and Margarita. The men fought the Caribbean natives, and took some of them prisoner. They then sailed along the northern coast-line of South America, and discovered a place where the native houses stood upon piles in the sea. Ojeda christened it Venezuela (Little Venice). He cruised along as far as Cape de la Vela, then stood out to sea for Hispaniola, and so home, where he sold his captives as slaves. He reported that he had seen an English vessel in West Indian waters. That report, and possibly the rumour of Cabot's venture southward in 1498, resulted in Ojeda's being given instructions from the Spanish Crown in 1501, when he went again to the Caribbean, to do what he could to stop English progress.

Another of Columbus's pilots, Pedro Alonzo Niño, sailed almost at the same time as Ojeda in 1499, and for the same coast. He cut dye-wood (brazil-wood), and bartered his merchandise for pearls. He returned with a rich cargo, only to be thrown into prison for his pains, on the accusation that he was hiding the full value of his cargo. That would have been a

notable offence in consideration of the fact that the King took a percentage of the profit on all cargoes. However, Niño was able to clear himself, and he became a popular hero. His voyage was of the kind after everybody's heart—rich and speedy.

Again, in the same year Vicente Yañez Pinzon made a voyage disastrous from a commercial point of view, but valuable by reason of its contribution to geographical knowledge. Pinzon was caught in a severe storm, and eventually found refuge on the coast of Brazil at a point now called Cape St Augustine. He himself called it Santa Maria de la Consolaçion. He took possession of the place for Spain, then sailed southward, discovered the mouth of the Amazon, crossed the equator, and fought the natives and took captives, losing about ten of his own men in the process. On the way home he spent several months in cutting brazil-wood on the shores of the Gulf of Paria, then steered his course for the Bahamas. Bad fortune dogged him, and he lost two of his four caravels before he reached home. He did not get the reception accorded to Niño. Cargo was the all-important matter in those days. Wealth was what men and kings wanted. Geographical discovery was by no means the primary object of these splendid ventures. Pinzon's discovery was extended to the south by Diego de Lepe, who, starting a little later than Pinzon, was on the water at the same time. He came home and reported that the coast-line still continued south of Pinzon's farthest discovery. He arrived back in September 1500. Ojeda had arrived the previous June, and Niño, beating them both, in April. They bring us to the opening of a new century.

The sixteenth century must have been a truly wonderful age to live in. To us, who read of its events in the mass, and thus feel the full blast of its magnificence all at once, it is almost incredible, but even contemporary folk who received their impressions bit by bit as events occurred, and therefore had the brilliant reports of adventure tempered gradually, generation by generation, to their understanding, must have reacted to the stimulation of the age, each man, woman, and child, whether or not they took part in the actual process of discovery.

Nor was discovery the only distinction of the century. As I have remarked before, discovery was part and parcel of the general progress of Europe. In this century the Dutch will enter the first phase of their history as one of the leading Powers

of Europe. The foundations of colonial empire are laid for several nations, though England and Holland make no territorial settlement until early in the seventeenth century. They have first to contest the power of Spain at home and at sea.

We are bound to confess that the foundations of colonial empire were laid with the greatest cruelty as well as with the greatest daring. Individual ambition, international jealousy, and the violent passions of the age generally, perpetrated the most barbarous excesses—Europeans upon one another, and all upon the unfortunate native, who was robbed, enslaved, and murdered.

It was in this spirit, and with a grim sense of humour, that the Araucanian Indians of southern South America (who are unbeaten to this day) poured molten gold down the throat of the great Valdivia, who came among them from Peru to rule their land, and to wrest from them the secret of their mines. Some say that the story of the molten gold is a picturesque invention, but it is certainly true that they saw no reason for trusting Valdivia's promises of reform and put him to death.

In Mexico the Spaniards found an interesting native civilization. They swept it away. In Peru they found another; they swept that away too. From the Guinea coast of Africa shiploads of native slaves were carried away to die under the rigour of their confinement on board, or to live to suffer a life of hard-driven labour in a foreign country. They were carried to the West Indies in the first place because the local native proved an unsuitable, unwilling slave. Whole families of these natives committed suicide together rather than fall into the hands of Spanish masters. The Spanish Government at home did make definite efforts to control their colonists as time went on, but law and practice were too often and too long at variance. Individual men, some of them missionaries, realized that conversion to Christianity should not be regarded as full compensation for the loss of land, independence, often life itself, and these men did what they could to bring their actions into relation with their religious profession; but though their efforts ameliorated the lot of the natives under their especial care it made little difference in the end to the aboriginee. Might was right, and he went under.

Courage is always romantic, but it is not the attribute of good and wise men only, though we are apt to make it cover a multitude of sins. Geographical history is crowded with



SPANISH EXPLORATION IN SOUTH AMERICA UP TO 1600
 From "A History of Geographical Discovery and Exploration," by J. N. L. Baker
 (Harrap)

stories of superhumanly brave men some of whom were altogether splendid fellows and some of whom were devils from every other point of view.

In the sixteenth century Portugal and Spain were still the centre of interest, and we must continue with their adventures.

The Spanish expeditions which penetrated South America from its north coast fall into three main groups, and belong to the years 1532, 1534, and 1536. If you look at the map you will see at the extreme north-west a port called Cartagena. This formed the starting-point for several adventures into what was later known as New Granada, a district finally conquered by Quesada in 1536. On the plateau of Bogota he found a comparatively civilized community of Chibcha Indians, living among the ruins of an older and finer civilization. Quesada therefore gave to this plateau the name of "the Valley of Palaces." During the second half of the sixteenth century both the Spanish and the Portuguese showed great enterprise and much activity in the New World.

CHAPTER XVI

PORTUGAL AND SPAIN IN THE EAST

IN the year 1500 Portugal sent out an important squadron to India to establish trade relations. Don Pedralvarez Cabral commanded it, and Bartholomew Diaz sailed as one of his captains. Cabral had orders "to treat with fire and sword any town that refused to admit either missionary or merchant." He intended to follow Vasco da Gama's course, but a storm blew the fleet miles out of its way, and eventually it sighted land on the coast of Brazil, near a point now known as Porto Seguro. He may have anchored in, and named, a little farther north, Bahia de Todos os Santos. But another Portuguese fleet, busy sinking French traders later on, claims that distinction. Sebastian Cabot, the son of John, has also been credited with its discovery. Cabral took possession for Portugal, and named the land Tierra de Santa Cruz (Land of the Holy Cross). When he sailed he left two *degradados* behind to spy out the land, and to learn the native language against the time when another Portuguese ship should follow up the discovery. Two cabin-boys deserted and kept the *degradados* company. What is a *degradado*? He was a criminal. Ships carried such men in order to send them ashore first if things looked threatening, or to leave them behind as Cabral did. It was either that or the gallows, and I have no doubt they preferred to take their chance.

Cabral sent one of his captains back to Portugal with the news of his find. The fleet then sailed for the Cape of Good Hope. Here they met a storm, and gallant Bartholomew Diaz went down in his ship. At Malindi Cabral renewed the trade agreement which Vasco da Gama had made, and, reaching India, established a fort at Calicut. He did not do it without some resistance arising from Mohammedan commercial jealousy. Some of the men he left behind were murdered. Before he returned home he had lost seven out of his thirteen ships.

While Cabral was still at sea a Gallician, João de Nueva, sailed for India, sent by King Manoel of Portugal, in March 1501. On his way out he discovered an island which he called

Ilha da Concepção. It is now called Ascension. His next anchorage was San Bras Bay, on the south-west coast of Africa, which Diaz had discovered, and where he had had a brush with the natives. Nueva found a letter in a shoe there, left by Captain Pedro de Ataíde, who had become separated from Cabral's fleet. The letter advised pilots steering Indiaward to make for Mombasa. At Calicut he met a hot reception from the Hindu ruler, doubtless urged thereto by the Mohammedans. On his way home he discovered St Helena.

In 1502 Vasco da Gama sailed again for India, to avenge the murder of Cabral's men and to consolidate his work. Da Gama subjected the inhabitants of Calicut to horrible cruelties. He attacked and looted a Mohammedan pilgrim ship from Mecca. Some, or all, of the children on board he took off in order that their souls might be saved by conversion to Christianity. Then, as a first lesson in that much-abused creed, he blew up the pilgrim ship with gunpowder with their parents in it. He then sailed to Cochin, on the Malabar coast, and managed to extract a trading agreement from its ruler.

The year 1502 launched several other interesting voyages. Columbus, exonerated and released from his chains, sailed this year on his last voyage. Gonsalo Coelho sailed for Brazil, following up Cabral's report, and on January 1 of this year entered a bay which he thought was the estuary of a great river. He called it Rio de Janeiro. The site was a mangrove swamp in those days. Miguel Corte Real set out to find his brother Gaspar, and was never heard of again. Their voyages were depicted upon a map drawn this year for the Duke of Ferrara. It is called the Cantino Map because it was drawn by the order of Albert Cantino. Yet map-makers were loth still—and for many years afterwards—to relinquish the geographical ideas of Ptolemy. Spain began colonizing on the Cumana coast, off which Ojeda on his first voyage saw an English ship. Ojeda took command of this colonizing scheme, and was ruined by quarrels among his fellow-captains and by complaints of the colonists. The pearl-fisheries were the principal attraction.

In 1503 Affonso de Albuquerque, destined later on to establish the Portuguese empire in the East, set out on his first voyage to India. When he got there he espoused the cause of the ruler of Cochin, who was quarrelling with his neighbours, and in return for establishing this man upon his throne he was allowed to build a fort.

The Mohammedan traders from the Red Sea, the Persian Gulf, and East African ports were already seeking a new meeting-place other than the Malabar coast, and were making direct for Malacca in order to collect the Far East merchandise before it could fall into the hands of the Portuguese. The King of Portugal decided that if he was to trade in security he must command the great Mohammedan trading-stations, choose a capital centre of his own, and develop it. Aden and Ormus must be his, and the East African coast towns, for so many centuries the pride of Arabian commercial enterprises. On the Malabar coast Goa should be his chief depot, and he would seize Malacca, "the keys to the Far East." Look at the map and you will see that Malacca is a town on the extreme point of the Malay Peninsula, overlooking the Strait of Malacca, which is bounded on the opposite side by the island of Sumatra—a very fine strategic position.



FERDINAND MAGELLAN

Albuquerque returned home in 1504, and in that year the King appointed Don Francisco d'Almeida as the first viceroy of his Indian possessions. D'Almeida sailed in early spring the following year, and took his son Lorenzo as his lieutenant. In the fleet sailed Fernão de Magalhães, later on to become world-famous under the slightly different name of Magellan. D'Almeida's orders were to attack the towns on the east coast of Africa on the way out. They resisted him, but he destroyed Mombasa and looted its treasure. Quiloa fell to him, and at Zanzibar he built a fort. One or two of his captains visited Madagascar. João Gomez d'Abreu sailed up the west coast and part of the east. He called the isle St Lawrence, for the usual reason that a saint's day coincided with his visit. Captain Fernando Soares was supposed to have sighted the island first.

In India d'Almeida resided in the fort built by Albuquerque at Cochin. He succeeded in arranging a trading treaty with Malacca. His son reached Ceylon and left a settlement. This young man also discovered for Europe the Maldiv Islands, which were known to the Romans and well known to the

Arabs. He was killed in 1508 fighting the Arabs and some Egyptian allies of theirs who disputed the presence of the Portuguese. His father took speedy and merciless revenge. At this crisis the King of Portugal appointed Albuquerque to succeed d'Almeida as viceroy. D'Almeida refused at first to recognize Albuquerque's credentials and even imprisoned him. The arrival of another fleet carrying the Grand Marshal of Portugal obliged him to submit. He sailed for Europe in November 1509. He was destined never to reach it. He anchored in Table Bay (then known as Saldanha Bay, after Antonio da Saldanha, one of Albuquerque's captains, who found it in 1503) in order to water the ship and refresh his men, and here, on the site of Cape Town, he fought the natives. They killed him, and sixty-five of his men, among whom were no less than twelve captains.

Albuquerque had had an adventurous voyage out. He had under his own command five ships in a squadron commanded by Tristan da Cunha (who discovered the island named after him). Together they successfully attacked the towns of the east coast, and then he and da Cunha separated. Da Cunha went on to Socotra to establish a fort there. The excuse of the Portuguese for this intrusion was that the degenerated type of Christian inhabiting the island had complained of ill-treatment at the hands of Islam. He reached India later. Albuquerque made for the island of Ormus, the key to Arab trade to and from the Far East, but he was unable to retain possession of it on this occasion. When he arrived on the Malabar coast he failed to capture Calicut, but he took the coveted port of Goa in January 1510. He could not hold it, and had to retake it the following November. It was to be the capital of the Portuguese East for a century. Albuquerque then turned his attention to securing Malacca and the Moluccas (the Spice Isles). In 1509 he had sent one of his captains, Antonio Lopez de Sequeira, to explore. Sequeira made a voyage which has become famous because he was the first mariner from the West to command a squadron sailing among the islands of the East Indies. He cruised along the north coast of Sumatra and Java (he reported that there were cannibals with gilt teeth here), reached the island of Buru, touched the extreme north-west corner of New Guinea, and ended up with Gilolo, and its principal village Ternate, where he found a paradise of spices.

In July and August 1511 Albuquerque succeeded in taking

Malacca. He spent a year there, consolidating his conquest. Part of his programme was to send another fleet of three ships to the Spice Islands. Antonio Abreu commanded it, and Magalhaes and his cousin Francisco Serrano sailed with him. They sailed round the southern coast of Borneo, discovered and put into Amboyna, and also discovered Banda (islands in the Moluccas group). Some said they reached Ternate, and left Serrano to make a settlement. Some say not, but that Serrano was shipwrecked, and made his way in a native canoe to Mindanao, one of the Philippine Islands. The others returned direct to Malacca with their good news. Serrano did at any rate reach Ternate eventually, as you will see later.

It was now the year 1512. Albuquerque sailed for Malabar. His ship and all his treasure went to the bottom in a storm, and he barely escaped himself. On his arrival at Goa he had to crush another revolt. The King of Portugal had ordered him to take an expedition to the Red Sea, and in the next year off he went and besieged Aden unsuccessfully. To give you some idea of the temerity of these old commanders I may tell you that he even had some idea of breaking the power of Egypt by diverting the channel of the Nile, so that the country would run dry. Two years later he attacked Ormus again and succeeded in capturing it. The Portuguese held it for over a century.

Intrigue at the court of Portugal ended Albuquerque's days in disaster. On his return from Ormus he found a fleet in the harbour of Goa bringing an old enemy of his to supplant him. Albuquerque in indignation and grief sailed for Europe, but died at sea in December 1515. So passed the real founder of Portuguese empire in the East.

Lisbon was now sending out to India about twenty ships a year. The voyage there and back sometimes lasted two years, and the loss of life aboard was exceedingly heavy. It is speed, refrigeration, and hygiene which have revolutionized sea-travelling, none of which the mariners of these days, or of many a century after, possessed. Provisions went bad; contractors often provided bad food in the first instance, which might not be discovered until too late; water gave out whenever by stress of storm or some unusual run of bad luck the ships could not make the usual watering-places. Scurvy, a disease caused by lack of green vegetables and other fresh food, carried off the men in scores. However, there was no lack of volunteers.

A good voyage paid them well. A ship costing roughly £4000 to equip would bring back a cargo worth £150,000.

When we remember that Europe prior to Albuquerque's time had great need of pepper, ginger, nutmeg, cloves, cinnamon, mace, and camphor, and that the supply was far behind the demand, we begin to understand what the traffic meant. Spices were almost as precious as pearls. Europe had not tea either, nor coffee, chocolate, and tobacco. Sugar was the greatest luxury, and food was still sweetened with honey and other substitutes. The discovery of the Indies and the Americas by Europe was to revolutionize the dinner-table, to say nothing of anything else.

Now we have established the Portuguese in the East we must return and follow the fortunes of the Spaniards. What have they been doing? Spain has been hastening to do two things. The first is to colonize the West Indies and the north coast of South America, that she may receive the full benefit of her seafarers' discovery of riches and not be ousted by rivals; the second is to seek a short cut to the East by a passage through the great continental barrier.

I think the first thing we must investigate is the affairs of Amerigo Vespucci. Since the great continent (which might have been called so naturally after Columbus, or after any of several others with more claim than this man) was named after Vespucci, we should know why before we go any farther. It actually received its name in 1507. In that year Martin Waldseemüller, the professor of cosmography at the University of Saint-Dié, in Lorraine, published a book called *Cosmographie Introductio*. In it there appeared a copy of a letter written by Vespucci from Spain in 1504 to a member of the Medici family in Florence, in which he describes four journeys of his own to the coast of America. He stated he had undertaken the first voyage as early as 1497-98, and the last and longest in 1503-4. In his account of the voyage in 1503-4 he carries himself down the east coast of South America as far as South Georgia. He was, as a matter of fact, neither commander nor captain of any expedition. Waldseemüller had no doubt of the truth of these statements, and was so much impressed that he suggested the new continent should be called America. The map-makers after a while adopted the professor's idea, though the letter did not go unchallenged by well-informed

pilots from the time it was first published. Authorities differ now on various points, but the greatest of them regard the claim as 'not proven.' Vespucci may have gone out to America in 1497, when a number of clandestine voyages—that is to say, voyages unlicensed by the Crown—were undoubtedly achieved. He certainly sailed with Ojeda in 1499, for Ojeda himself said he did. These first two voyages were under the Spanish flag, the other two under the Portuguese flag. All very questionable,

**Nunc vero & hec partes sunt latius illustratz / &
alia quarta pars per Americū Vesputium (vt in se-
quentibus audietur) inuenta est: quā non video cur
quis iure vetet ab Americo inuatore legatis inge-
nū viro Amerigen quasi Americi terram / siue Ame-
ricam dicendam: cum & Europa & Asia a mulieris
bus sua sortita sint nomina. Eius sicut & gentis mo-
res ex his binis Americi navigationibus quę sequū-
tur liquide intelligi datur.**

FACSIMILE OF THE PASSAGE IN WHICH WALDSEEMÜLLER PROPOSED
THE NAME 'AMERICA' FOR THE NEW WORLD

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

thought the Portuguese pilots. Vespucci did not proclaim in Portugal any account of his doings, though he actually wrote his letter from Lisbon. He knew very well his word would be challenged. In 1505 he became a naturalized Spanish subject, and settled in Seville, and naturally the Spaniards would be glad to claim his honours for Spain.

Spain appointed him her Pilot Major in the year after the letter was published, though he was not the best pilot in the country, which we may well believe, for he was a merchant by profession and did not go to sea till he was fifty. However, he evidently had the intelligence necessary for the academic side of his duties, which were to instruct would-be pilots in the use of such nautical instruments as the time possessed—the astrolabe, the quadrant, the cross-staff, the compass; and there we must leave it. He never went to sea again. Official documents keep track of him from this time until he died in Seville in 1512.

In passing we must note an edition of Ptolemy, edited by John Ruysch, which was published at Rome in the same year that Waldseemüller published his *Cosmographie*. On this map

appeared for the first time on a map of the world the complete sum of Columbus's discoveries. In 1500 Juan de la Cosa had drawn a map of the world which incorporated Columbus's work up to that time. Ruysch did not give America a name at all. His map was also the first to mark the discoveries of the Portuguese on the African coast, and the first to give India



The term 'Spanish Main' is usually confined to the mainland of America between the isthmus of Panama and the mouth of the river Orinoco, and should not, strictly speaking, include the islands of the Caribbean Sea.

something of its full value as a peninsula. The interior of Asia was also better drawn. Bernard Sylvanus three years later published another edition of Ptolemy, and amplified Ruysch's work. He called America the Land of the Holy Cross—Cabral's name for it.

In 1475, nearly twenty years before Columbus discovered America, a son was born in Xeres-de-los-Caballeros to a noble but impoverished Spanish family called Balboa. He grew up a reckless youth, and settled in San Domingo. More reckless than lucky, he went as a stowaway on the expedition to Darien launched in 1510 under the leadership of Francisco de Enciso. An insurrection broke out, and Balboa, thanks to

his energy and enterprise, obtained supreme command of the Spanish forces. He was a dreamer as well as a 'doer,' for the vague rumours which reached him of a vast ocean to the westward haunted his thoughts until he had no choice but to set off in quest of it. On September 25, 1513, he caught his first glimpse of the Pacific from that "peak in Darien" of which Keats wrote. But you will remember that it is to "stout Cortez," instead of to Balboa, that the English poet gives the credit of being the first European to behold the Pacific. Meanwhile, far away in Spain, things had not been going well for 'stout Balboa,' and intrigues against him at the Spanish court led to the governorship of Darien being given to a much less able man, Pedrarias d'Avila. Balboa married d'Avila's daughter, and was forced to continue his exploring and colonizing activities in a subordinate position. Relations between the two men became strained, and jealousy, resentment, and disapproval inflamed them both. In the end d'Avila had his son-in-law beheaded, a most unwarrantable proceeding; but colonization in Darien was by then an established fact.

CHAPTER XVII

SPANISH VOYAGERS AND THE FIRST CIRCUMNAVIGATOR

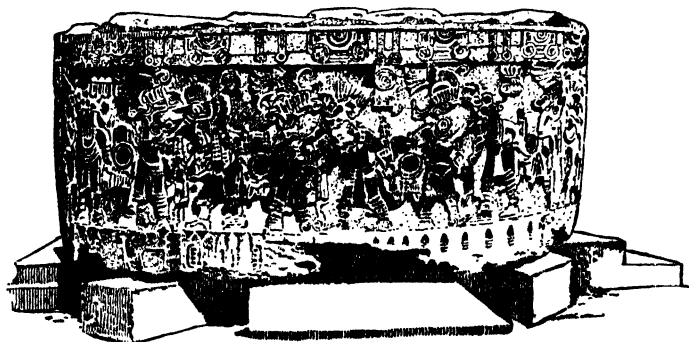
WHILE Balboa was adventuring in Panama several voyages of importance were taking place elsewhere. In 1512-13 Ponce de Leon, sailing from Porto Rico, where he was governor, in search of the Fountain of Eternal Youth, discovered the coast of Florida.

In 1515 Juan de Solis was sent to discover a strait through the American continent and found the mouth of the Rio de la Plata. He sailed up it for some distance, hoping it was to prove the strait he sought. The water became fresher and fresher. It was indubitably a river. Solis was killed by the natives.

About the time of Balboa's execution Hernandez de Cordova on a slave raid from Cuba to the Bahamas, and driven out of his course by gales, found himself on an unknown coast. He questioned the natives, who, not having been visited by the white man before, were friendly enough. What country was this? "Ouyukatan," replied the natives. What they meant was that they did not understand the question, which, as it was asked in Spanish, was not unnatural. But Yucatan the country became for the Spaniard, and it has remained Yucatan ever since. Cordova was astonished to find these people surrounded by great temples, and clad in beautifully woven garments decorated with gold ornaments. Gold! The natives' disinclination to part with their belongings led to a fight in which half the Spanish company was wounded, including Cordova himself, who died of his wounds not long after the fleet arrived home.

The next year the governor of Cuba sent out Juan de Grijalva to explore. He not only procured further information about Yucatan, but landed on the coast of Mexico, and came into touch with the Aztec people, rich, civilized, so soon to fall a prey to the predatory Spaniard. That discovery opened the most thrilling chapter in the story of Spanish conquest in America. In the year 1519 Hernando Cortés, a young Spanish nobleman recently arrived from Spain in the service of the new

governor of Hispaniola, sailed for Mexico with an army, and was received by the Aztec Emperor, Montezuma, in November of that year. The advance of Cortés through the country was aided by Mexicans who had been conquered by Montezuma and were ready to avenge themselves. Even so, the advance was an astonishing piece of generalship and endurance. The fate of the Emperor and of his people is one of the saddest stories in the annals of Western expansion. It is only equalled



AZTEC SACRIFICIAL STONE

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

by the story of Atahualpa, the Emperor (Inca) of Peru, to be enacted within the next decade. The one died of grief, the other was murdered outright. I am not going into detail about the Aztecs, nor about the Incas. If you do not know these stories already you must read them for yourselves some day. They are long stories, full of tragedy and violence. Francisco Pizarro had, like Balboa, desired ardently to reach the land of gold, and by the time Mexico and Yucatan were discovered plans were being made and tentative little voyages were taking place on the Pacific borders of Panama. In 1526 Pizarro landed in Peru and set about his war of extermination. The story that the Inca offered to ransom himself for a room piled man-high with gold, and that the ransom was fully delivered, is quite true. But the Inca was murdered all the same.

Now we must turn to Spain, the homeland itself, for momentous happenings are toward. In the year that Cortés landed in Mexico there sailed from the port of San Lucar a fleet destined soon to become renowned for all time. It was

commanded by the Portuguese Fernão de Magalhães, the Magellan whom we have already met. But why was Magellan now in the service of Spain? We left him last in the service of Portugal. It is difficult to get to the bottom of these old scandals, but the long and the short of this story is that the King of Portugal felt that he had reason to mistrust Magellan, and would not give him the reward for his services that Magellan



MAGELLAN'S SHIP, THE "VITTORIA"

felt he deserved. The irascible mariner took a drastic step. He had not lost touch with his cousin Serrano in Ternate, and Serrano had urged the advantage of further voyages to Ternate, and had expounded the facilities for trade. Magellan flung off all patriotic qualms, and took his story to Charles V, now King of Spain and newly crowned Emperor of the Holy Roman Empire. Magellan pointed out that he wished to prove to the Emperor and the world that the Moluccas lay on the Spanish side of the line of demarcation. At any rate, it was well worth while making a bid for the possession of the place. Charles stipulated that nothing was to be done to the prejudice of "the most serene King of Portugal," but that was only a pious aspiration.

Magellan hoped to discover that he could reach the East by sailing through a strait in the tail of South America. Now, that

is interesting, is it not? How did he know there was a strait so far south? Was it simply because ships had sailed so far without finding one that he was pretty sure that if he went any farther he was bound to find one? Not altogether. As a matter of fact; a German of Nuremburg named Johann Schöner had made a globe in 1515 upon which such a strait was marked. This man had got information from a pamphlet which had been translated into German from the Portuguese. (Some folks say that it was Vespucci who found the strait.) The pamphlet described certain expeditions to the South Seas, commanded in 1501 by Gonzalo Coelho and in 1503 by Christopher Jacques, at least one of which was financed by a man named Haro. Haro now gave his voice in Magellan's favour. Evidently Magellan had some first-hand information to go upon, but he was a secretive fellow, and fully alive to the danger of too much talk if he was to perform his voyage without a rival, so we have no proof of where he obtained the knowledge he possessed. Another map of 1515, in the possession of the great Florentine, Leonardo da Vinci, though in general very inaccurate, yet separated South America from the continent of "Terra Australis Incognita," a great sweep of southern land which the map-makers had taken to drawing on their maps.

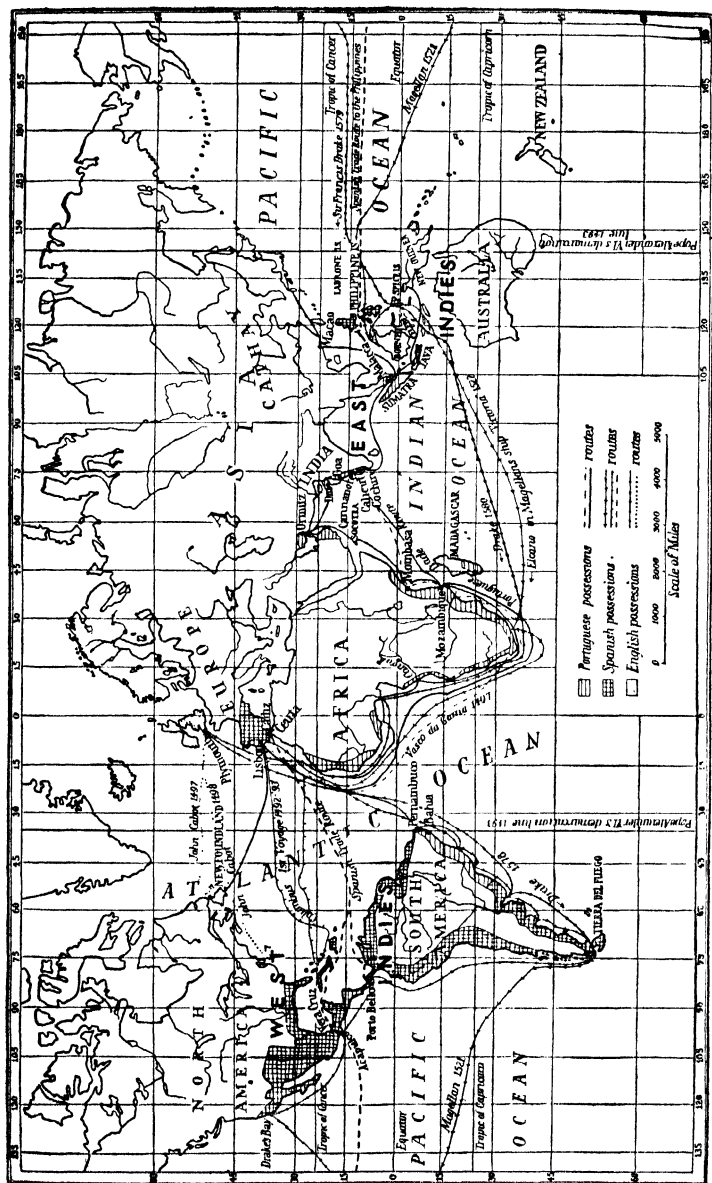
Magellan had a great deal of trouble before he started. The King did not altogether trust a turncoat Portuguese, and insisted that only a limited number of Portuguese should sail with the fleet; and there were jealousies and exhibitions of the usual greedy and childish passions which beset adventurers. Portugal got wind of the business, and resentment ran so high that the Archbishop of Lamego (afterwards Archbishop of Lisbon) even suggested that Magellan should be murdered, and he was guarded in the streets of Valladolid by Bishop Fonseca's men. In September 1519 the fleet sailed from St Lucar. It was composed of five ships. The flagship *Trinidad* was only 110 tons, another was 120, another 90, another 75, and the *Vittoria*, destined to be the only one to complete the voyage and in so doing to make the first circumnavigation of the globe, was only 85. The *personnel* numbered about 280. They were of mixed race—Portuguese, French, Italian (nearly all Genoese), a German, and an Englishman (who was a pilot, and a bad one). Only a remnant of them ever reached home, of whom eighteen were in the *Vittoria* and four were survivors of the *Trinidad* who struggled home later. It cost £50,000 to

equip the fleet. The Crown defrayed the bulk of this, and Haro and some others the rest. We know a great deal about this voyage because there travelled with the fleet an Italian nobleman, a Knight of Rhodes, named Antonio Pigafetta, and he kept a diary. He managed to survive the whole voyage, coming home in the *Vittoria*.

The first port of call in America was somewhere near Cape St Augustine. Here the crew replenished the stores, making great bargains with the natives for fowls, pineapples, and *patates*, "which," writes Pigafetta, "is a name they give to roots somewhat resembling our turnips." The roots were sweet potatoes. Pigafetta himself exchanged the King of Spades from a pack of cards for half a dozen fowls. As for the natives, they thought the ships' boats were the ships' babies. Pigafetta learned a good deal about Brazil from one of the ships' pilots who at some time had lived there for four years.

They then coasted along to La Plata, where poor Solis and sixty of his men had been killed and, Pigafetta tells us, eaten by natives. Pressed by bad weather, they put in for two months at Port San Julian, and here came to a climax a mutinous spirit which had been brewing in the fleet. The four captains of the ships other than the flagship plotted to murder Magellan. Magellan discovered the plot, and promptly executed two of the men. One of these was flayed alive, which gives you an idea of the terrible punishments of the time. It was in this port that the fleet made the acquaintance of the tall natives who increased so much in stature as the tale went the rounds of Europe. They were only about six feet. It was certainly tall for that time in Europe, when the average height of men was less than now. The natives wore clumsy skin shoes which made a huge imprint on the ground like a bear's paw, and it was by these footprints the crew first knew them. Patagonians they called them. *Pata* is the Spanish for 'paw.'

Magellan kidnapped two of these unfortunate people by the meanest trick. He invited them on board and loaded their hands with gifts, and then showed them as a *pièce de résistance* two iron rings of the kind used in Europe for shackling criminals. The natives, who knew only enough of iron to realize that it was valuable to them, of course showed how eagerly they wished to possess the rings, and permitted Magellan to place them on their legs. The attendant sailors promptly clamped on the chains which belonged to the rings, and the deed was done.



ROUTES OF THE EARLY NAVIGATORS

Vainly the victims stormed and called upon Setebos, their god. (This is where Shakespeare gets some of his ideas for *The Tempest*.) They were destined to die, first one and then the other, during the voyage. Not satisfied with this success, Magellan endeavoured to make other captures. The natives made a fight for it, and with their primitive weapons even killed one of the crew. This was the sort of thing which happened so often when the native made acquaintance with the white man, and which was at the root of many a massacre and the source of centuries of mistrust.

Magellan then erected a cross in token of his having taken possession of the spot for Spain and Christianity, and sailed away. On the feast-day of St Ursula they sighted a cape and anchored there. They called it the Cape of the Eleven Thousand Virgins (after companions of St Ursula of whom legend had it that they were martyred by the Huns). They were at the entrance of the long-sought strait, and they gave it the same name as the cape. The crew did not believe it was a strait, but Pigafetta tells us that Magellan trusted to a chart he had seen, drawn by Martin Behaim (the geographer who made the globe), which marked a strait in these latitudes;¹ and if he were not sure this was actually the strait he knew he was about to come upon it. This might be a bay. Magellan sent two vessels ahead to reconnoitre. A terrific storm fell upon them, and they could not get back to rejoin the flagship, but were driven through the strait in imminent peril of shipwreck. As they sought shelter farther and farther in they realized, by certain signs in seamen's lore, that they really were in a strait. The storm abated, and after two days Magellan and his waiting ships, who had given them up for lost, saw them returning—flags flying, guns booming, and all sails spread. What a wonderful sight! Remember how beautiful the old sailing-ships were, and then realize how these two conquerors, carrying the proud news back, give one a glimpse of the compensations vouchsafed to the sorely tried mariner of those old days. It was October 1520—within a month of the Antarctic mid-summer.

The whole fleet now sailed into the strait, feeling its way up this channel, into this bay and that, and out again; seeking the final outlet to the ocean. The ships separated, the better to

¹ Pigafetta must have been mistaken: it was the globe of Johann Schöner (see p. 173) which showed the strait.

reconnoitre, and under cover of this plan one of them deserted, and sailed back to Spain. The pilot was Emmanuel Gomez, who hated Magellan, for he himself had wished to command such an expedition as this, and he regarded Magellan as his supplanter. Also, as a Spaniard he resented service under a Portuguese. He had plotted with other Spaniards on board, and they clapped the Portuguese captain into irons. One of the Patagonians was on board this ship, and he died in the tropics.

On November 27 the remainder of the fleet, after a week's passage, passed out of the strait into the Pacific. Magellan gave the ocean this name, but only the ocean was pacific. On board they had a terrible time. For nearly four months they wandered over the empty sea without an opportunity of replenishing their provisions. Weevils reduced the ship's biscuit to dust; their stock of water became bad; a man fortunate enough to catch more mice than he could eat himself would sell them to his fellows at half a ducat each. (A ducat was a gold coin worth about nine shillings.) They soaked the leather of the rigging and ate it. Nineteen died of scurvy, including the unfortunate Patagonian (whom they baptized when he was dying and called Paul), and a native they had taken from Brazil. The only land they saw was desert islands in the Paumotu Archipelago which offered them no succour, and not even fish—only shark. They called them *Las Islas Desdichados* (the Unfortunate Isles), and distinguished one of them by the name of St Paul in memory of the Patagonian, and the other by christening it after the sharks.

On March 7, 1521, they reached a fair anchorage at last. The natives stole one of the ship's boats, so they called the isles *Islas de los Ladrones* (Thieves' Isles). They watered the ships and refreshed themselves, and sailed two days later. On March 16 they reached the southern point of Samar, in the Philippines. In these islands occurred the calamity which ended in the death of Magellan and many others.

Magellan involved himself in native quarrels. These people had some civilization, and were not savages by any means. Chinese ships visited them, and probably by this time a few Portuguese. The islands had their own chieftains or kings, and some of the amenities of life. Magellan first of all set about converting the kings of two of the islands. Unhappily he promised in reward for baptism to help one baptised king against his enemies, and assured him that if he embraced the

Catholic faith he would become invincible. The long and short of it all was that Magellan was killed in action (April 1521). The king promptly lost faith in Christianity, and, inveigling ashore some members of the fleet under the pretext of wishing to hand over to them some precious stones for the King of Spain, slaughtered them. Their horrified fellows watched from the ships the commotion on shore. Among the shore party was one of the two men who had been elected joint-commanders of the fleet in Magellan's place. This man, wounded and held prisoner, came with his captors down to the beach and implored his co-commander, Johan Carvago, to ransom him. Carvago sailed off with as much speed as possible and left him to his fate. As Pigafetta points out in his diary, with his superiors dead the command would fall into Carvago's hands.

About this time the fleet was obliged to burn one of the ships because there were not enough men left to man her. They cruised off to other islands, and made friends with the king of part of Mindanao, and arranged a trading alliance with him. Some days later they came upon Borneo, and the king there sent out a handsome 'pirogue' to meet them. (A pirogue was a swift, peculiarly made craft which later voyagers remarked upon.) Musicians on board met the visitors with glad strains, and the king sent provisions and presents and an invitation to land. A party from the ships went ashore, where elephants carried them to court. The king was a Mohammedan. Long before Mohammedan missionaries in the wake of Arab traders had reached the island.

For about three weeks the captains upheld an amicable intercourse, exchanging presents, trading, and provisioning the ships. Then they became suspicious. Several good-sized junks had anchored near the Spanish ships, and shortly afterwards no less than a hundred pirogues advanced towards the fleet's anchorage. The Spaniards promptly fired on the junks and captured some of them. Johan Carvago accepted a bribe (which he kept for himself) and released the junk's commander. Nothing further happened. The pirogues did not attack, and the king sent a message, by one of the two men stationed ashore for the purpose of trading, to say that no attack had been intended. Carvago's own son seems to have been ashore too, and now the injured king refused to return him to Carvago, and the fleet left the island without him.

Still bent on trading, they sailed for further isles, taking more than one pirogue which had the misfortune to cross their path. On November 8 they entered the harbour of Tidore, an island near Celebes. Here they made so good an impression upon the native ruler that he even offered to change the name of his island to Castile. So they gave him the chair he sat upon on board, with many other presents, as an inducement to keep his vows of friendliness and willingness to trade. They loaded up with a cargo of cloves from Tidore and, through the good offices of the king and his boats, from the neighbouring isles too. They heard that Francis Serrano was dead. He had been "Captain-General to the King of Tarenate" (Ternate), and had offended the king of Tidore, who was at war with Ternate. So this monarch had poisoned him one day when he came to buy clothes.

A Portuguese from Ternate came on board now. He gave the adventurers all the information they wanted, and warned them that the King of Portugal, resenting the desertion of his subject Magellan, had sent out a fleet to waylay his ships on the homeward journey, that this fleet had turned aside to cope with Arabs who were meditating an onslaught upon Malacca, but that other ships were prowling about on the look-out for them in these very seas. He told them too about the increasing trade in spices which Portugal was building up in the Moluccas, and what care was taken to keep this rich commerce a secret from Spain. For his pains they offered this Portuguese with his wife and family a passage to Spain. It was time to make for home.

The old flagship *Trinidad* was leaking badly, and the native divers (men trained to remain some time under water) could not locate the leak. So they decided she should remain behind to careen, and make her way back over the Pacific to Panama, while the remaining ship, the *Vittoria*, commanded by Sebastian del Cano, should complete the voyage by way of the Cape of Good Hope. The *Vittoria* was heavily laden with cloves, and was in none too sound a condition herself. Some of her company preferred to remain in the Moluccas. On December 21 two native pilots came aboard to guide her through the islands. They anchored at the island of Sula and at Buru, and then, storm-tossed, took refuge on a third isle, where the natives were cannibals. Here they repaired the damage the storm had done to the ship, bartered with the inhabitants (a

pound of old iron brought them fifteen pounds of wax), and took on board a native who promised to pilot them to an island where they might trade again. He brought them to Timor. They loaded with sandalwood and wax, and left on February 11, 1522, but not before some of the men had deserted and some had been executed for mutiny.

They went warily now for fear of the Portuguese. Java and Sumatra were too dangerous. They headed straight for the Cape of Good Hope. On May 6, after nine weeks of battling against the winds, the *Vittoria* rounded the Cape. She was leaking, her provisions were reduced to rice and water, and many of her men were sick and half frozen with cold, yet she dared not put in for fear of capture. Twenty-one men died before she reached the Cape Verde Islands and anchored in the port of Santiago. Here they met with a surprise. They found that the date at Santiago was the 10th—not the 9th, as they supposed. They had lost a day as the result of going round the world. They had a narrow escape from capture. Though they gave out that they had come from the Brazils, an incautious sailor exchanged some spices for something he wanted, and the truth leaked out. They slipped away only just in time. On September 6 they sailed into the harbour of San Lucar. Out of the sixty who left the Moluccas only eighteen men remained, “most of whom were sick.” Some could be accounted for by desertion and execution, but most of them had died of scurvy and hardship. Two days later they anchored off the mole at Seville and saluted. Barefooted and in their shirts, carrying tapers in their hands, they marched to church to give thanks for their deliverance, and to ask pardon for having celebrated their saints’ days on the wrong dates, owing to the dropping of a day in the course of their voyage round the globe.

I have gone into detail about this first voyage round the world not only because it *was* the first, but because its details give you an idea of the methods and motives of the time. It is not possible within the scope of this book to do equal justice to the famous voyages to follow, nor to the great schemes of colonization which marked the expansion of the leading European nations. My aim has been in the first part of this book to unfold to you how people of the Old World gradually spread over the whole globe; then how the hidden continents came to light, and how the people of Europe laid the foundations of

what is known as "the expansion of Europe"; for it is European enterprise alone which carries forward the revelation of the earth's surface, and establishes European stock in all the quarters of the globe. We can but review the foundations of this expansion, which will show you the principle upon which it progressed. For the rest, the history of colonization and of the scientific exploration of later days is a story of very many volumes, already written and still being written, awaiting your interest when you are ready for it. I shall leave you where the sea-ways are open and the nations in a fair way to complete the knowledge of their inheritance.

You will realize something of the dramatic speed with which Europe took hold of discovery when you remember the long course of our world history, and that up to the later years of the fifteenth century ocean traffic was confined to the North Atlantic, and from the Red Sea to the near Western Pacific. Yet within two hundred years another hemisphere had been discovered, and hundreds of ships launched upon the ocean highways.

In the remaining portion of this book I shall tell you how, when the Portuguese and the Spaniards had led the way, the other nations joined in and completed the spade-work in the process of establishing the world as we know it to-day.

CHAPTER XVIII

INTERNATIONAL RIVALRY

HAS it occurred to you that trade, conquest, and religion were the three great forces which opened up the world, and that trade was the first and most powerful of these forces? It was the competition in trade which hastened discovery, and produced the remarkable record of the sixteenth and seventeenth centuries. Portugal and Spain would have kept their discoveries to themselves if they could, and did keep as much to themselves as they could, in order that others might not share the resulting riches, and if other nations had not possessed the spirit and determination to gain a place in the sun for themselves the world would have developed more slowly.

Luckily, England, the Netherlands, and France were alive to the situation, and though they recognized in theory the right of Spain and Portugal to retain what they had found if they had already established traders and settlers there, they hastened to possess themselves of whatever lands and trading agreements the Peninsula Powers had not monopolized—and often, in actual fact, of what they had. As time passed all of them made use of the opportunities of international warfare to appropriate each other's belongings abroad. News travelled so slowly that occasionally a pretty little conquest in the colonies had to be given back because peace had been declared in the home countries before the conquest took place.

Let us look at the situation after the *Vittoria* returned. Spain had claimed the route *via* the mid-Atlantic to America and on to the East as soon as she could find her way through (as she hoped) the continental barrier. Portugal had claimed the Cape route. Nominally the seas were free, but as Spain and Portugal claimed a monopoly of trade in the ports along their respective routes and the right to exclude foreign ships, they were to all intents and purposes of no use to anybody but themselves; and they themselves were to quarrel over the exact position of their line of demarcation on the eastern side of the globe.

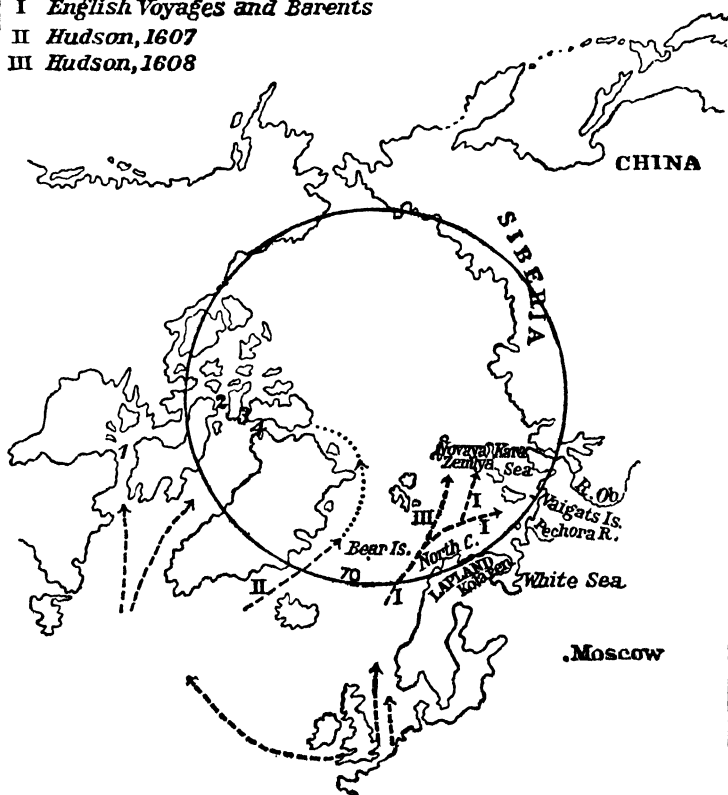
It remained for the other nations to find a way to the East by a north-east or north-west passage. You all know something of the sad and valiant story of the attempts to discover

THE APPROACHES TO THE NORTH-WEST PASSAGE

- 1 *Hudson Strait*
- 2 *Lancaster Sound*
- 3 *Jones Sound*
- 4 *Smith Sound*

THE APPROACHES TO THE NORTH-EAST PASSAGE

- I *English Voyages and Barents*
- II *Hudson, 1607*
- III *Hudson, 1608*



THE APPROACHES TO THE NORTH-EAST AND NORTH-WEST PASSAGES

From "A History of Geographical Discovery and Exploration," by J. N. L. Baker
(Harrap)

these passages. It is the story of an endeavour which led, as the centuries went on and the impracticability of such trade routes had long become apparent, to exploration of the Arctic for its own sake.

The first and most important voyage of northern exploration after the *Vittoria* returned was to the north-west, and was performed by France. The Breton fishermen who had been so early on the cod-banks were fishermen pure and simple, and had no thought of contributing to bigger schemes, and the only earlier French expedition towards the Indies of any note was along the Cape route. It had been commanded by Captain Binot Paulmier de Gonneville, with two lieutenants, Andrieu de la Mare and Anthoync Thury, who sailed from Harfleur in 1503. They had made for the East by way of Brazil and then across to the Cape of Good Hope, and had reported that after rounding the Cape they found new land. The French made some claim in later days that these men had landed on the coast of Australia, but modern authorities agree that, if anything, this unknown land was Madagascar.

Now, in 1524 the French Government made a serious preliminary venture towards finding a passage by sailing westward. Francis I was king in these days. He was young and ambitious. He had inaugurated his succession in 1515 by promptly attacking Italy and contesting the claims of Spain there. He was rival candidate with the young King Charles of Spain for election as Emperor of the Holy Roman Empire,¹ and though he became Charles's brother-in-law, he continued his rival. He met Henry VIII of England in all the splendour of the Field of the Cloth of Gold when England was playing off France against Spain. But the Queen of England, Henry's first unhappy wife, Catherine of Aragon, daughter of Ferdinand and Isabella, was aunt to Charles, and her relationship proved a stronger political tie for the time between England and Spain than did the relationship between Spain and France.

Francis had in his service a Florentine seaman, Giovanni da Verrazano. In 1522 Cortés, the Spanish conqueror of Mexico, who had first landed on the Mexican coast in 1519, sent home to Spain two ships laden with treasure. A French privateer captured them, and in addition another treasure-laden vessel from Hispaniola. They were a revelation to Francis: Charles could carry on war against him with the money he got from

¹ The election cost Charles 850,000 florins in bribes.

his American stations alone. He resolved that something should be done about it, and it was then he made his historic remark that if Charles wanted a monopoly of the world's riches he would have to produce Adam's will showing that Adam had made the Spaniards his universal heirs. He commanded Verrazano to explore the coast-line of North America from Florida (an elastic term in those days) to Newfoundland. He gave out that Verrazano had sailed to seek a north-west passage. Verrazano cruised from Cape Fear, in what is now North Carolina, to Cape Breton Isle, and returned home with his report. Francis conveyed to the Pope his intention to claim the coast-line to this extent, and sent Verrazano off privateering again. He took several prizes, but on the way home he ran into a Spanish squadron, which captured him, and Spain soon after hanged him for a pirate.

Francis's luck was out altogether, for about this time Charles took him prisoner at the battle of Pavia and carried him off to Madrid. This and subsequent events called a halt to venture abroad. You will be amused to hear what happened at home. Francis's mother, the Dowager Duchess of Angoulême, wrote on her son's behalf to the Sultan Solymán the Magnificent at Constantinople, and the envoy carried presents with the intimation of the French King's friendship as a preliminary to an alliance between them. The envoy and his company were robbed and murdered before they reached the Sultan. Then the King sent a letter himself dated from Madrid, suggesting that Solymán should attack the King of Hungary, doubtless with a view to drawing off Charles's attention to the eastern borders of his domains, and also to flatter the Sultan. Solymán, the diplomat, replied politely and modestly, though vaguely, that as he was Sovereign of Sovereigns and distributor of the crowns of monarchs over the surface of the globe, it was only natural that the oppressed Francis should apply to him, and he assured Francis that, for himself, he went to bed with his sword and his horse stood saddled in the stable.

Meantime Charles drew up a treaty, and made Francis sign it, wherein Francis ceded much territory to Charles and suffered a grave loss of prestige. Then they discussed an expedition against Solymán together. Poland had just concluded a peace with Solymán, but with or without France's advice Solymán was already attacking Hungary, and Hungary was hard put to it. Twenty thousand Hungarians had been killed,

and their King, Ladislas, had lost his life during the campaign. His horse had slipped while crossing a stream, and he was drowned. Luther the Reformer made the unhelpful suggestion that the Turks were a visitation of God, and to resist them was wrong. (He changed his tune when Solyman threatened Germany two or three years later. Then he blamed the Popes and bishops, which may have been good Protestant propaganda, but was not good sense.) Two men quarrelled over the succession to the throne of Hungary, and one of them made an alliance with Solyman, which established his claim, for Solyman did not wish to annex Hungary at the time. He had already too much to think of: trouble was brewing in his Asiatic domains. Francis seized the opportunity to make an alliance with Solyman's nominee, and to arrange that if he died without a son his crown should descend to Francis's son, the Duke of Orléans. That neat little arrangement never came off.

Neither did Francis and Charles ever make a concerted attack on the Turk. Charles released Francis, who, intriguing with the Pope, promptly repudiated his treaty vows on the grounds that he could not legally sign away French territory without the permission of his Council. Charles's attention was called off to Italy, where the Pope had revolted against his claims. The result was that Charles's German troops sacked Rome, and sacked it as heartily as any Vandal. The Pope became Charles's prisoner, and was obliged to acknowledge all Italy, with the exception of Venice, which was strong enough to maintain her independence, as subject to Spain.

Charles and Francis went merrily to war again, and during this war Francis, who was a Roman Catholic, intrigued with Charles's rebellious Protestant subjects in Germany, whose activities so distracted their King that he was prevented from giving Francis his full attention. Francis was thereby saved a second humiliation. In 1529 the two monarchs patched up a peace for seven years, which gave Francis breathing-space in which to bethink him of America again.

In 1534 he sent out one of his own subjects, Jacques Cartier, to seek a north-west passage to the East. Cartier reached the Gulf of St Lawrence and explored it, and also the coast of Labrador, whose bleak and barren shores so appalled him that he described it as "very likely the land given by God to Cain." He came across a French fishing vessel from La Rochelle in a



JACQUES CARTIER'S ASCENT OF THE ST. LAWRENCE

Théodore Gudin

Versailles Gallery

harbour there. On the shores of Chaleur (Heat) Bay, which he named because it was a hot July day when he entered there, he made amiable contact with the natives, who entertained him with dances and to whom he gave presents. When he returned home his reports so pleased the King that he sent him out again the next year. Cartier had taken home with him two Indians the first time, and now returned with them. They were able to supply him with useful information. He found his way up the St Lawrence river, where he came upon two large native settlements. The farther of the two was near a great mountain which Cartier named Mount Royal (corrupted to Montreal in the name of the city now lying below). The scenery was magnificent, and the river a royal highway. Cartier wintered in a roughly built fort near the first native village. He and his men suffered badly from cold and scurvy, and they were not altogether happy about the natives' attitude towards them, though Cartier had had friendly interviews with the chiefs. The natives, however, with the sap of the spruce-tree cured some of the sailors of scurvy. The Frenchmen returned these good offices by capturing several local chiefs to take to France—so utterly blind were the Europeans of the age to the rights and feelings of other human beings, whom they regarded as existing somewhere between themselves and animals.

Cartier raised a cross upon which were inscribed the arms of France, and sailed for home. He made two other voyages, the first of which was the voyage which gave Eastern Canada to France for over two centuries, and still preserves in a British Dominion the descendants of her colonists and their right to speak the French language.

Cartier was the first to sail down the St Lawrence river, but he was not the first to discover the gulf. Portugal had followed up the adventures of Gasper and Miguel Corte Real, and considered north-eastern America part of her dominions. Many of her vessels visited the region. An attempt was made even at colonization. Some time early in the century King Manoel gave letters patent to an explorer, Joam Alvarez Fagundes, appointing him governor of any islands or other lands he might discover beyond the Atlantic. This promise materialized in 1521, when Fagundes reported islands and mainland hitherto unknown. His chart showed that he had sailed into the Gulf of St Lawrence and along all its coasts, and then down the east

coasts of Cape Breton Island and Nova Scotia. He attempted to settle a colony on Nova Scotia, but it was soon abandoned.

However, in 1541 the first French colonists sailed to make their new home, under the leadership of Jean-François de la Roque (known as Roberval), accompanied by Captain Jehan Alfonse, a navigator who distinguished himself in exploring the north-eastern coasts of America. Francis I died in 1547, and the colony for some time suffered from neglect caused by the troubles of the Reformation in Europe and their complication with the ever-recurrent feud between France and Spain. France's next venture in colonization was to be the outcome of the problems of the Reformation, and there we must leave her while we return and bring up to date the adventures abroad of Portugal and Spain.

Events all this time had been moving rapidly in South America and in the East Indies. In 1526 the son of John Cabot, Sebastian, who served both Spain and England at various times (not quite straightforwardly), was employed by the Emperor Charles to follow up Solis's discovery of the Rio de la Plata. Several of the *Vittoria's* old crew accompanied this expedition. When Cabot reached La Plata he found three of Solis's men surviving. He stayed there four years, and from this time, though the greatest difficulties and sufferings beset explorers and settlers, the development of the country went on, and was eventually linked up with the work of Pizarro and his followers in Peru. Asunción was the capital settlement of the Rio de la Plata colonists, and from there the captains forced a route through Upper Peru (Bolivia).

The development of Peru went steadily forward from 1532, though jealousy and revolt among the Spanish captains brought about civil war and many painful incidents. From Peru officers were sent into Chile and Patagonia, there to conquer and form settlements. They did form settlements, but they never succeeded in completely subduing the fierce Araucanian Indian whom they encountered in those parts.

Venezuela received its first governor in 1530. He was a German. The Emperor, in the adjustment of debts owed to a German firm of bankers, leased them the country. The governor was hideously cruel to the natives, and they murdered him. Other Germans followed for a time, and contributed to the exploration of that part of the continent.

Spanish officers received grants in the country now called Colombia, and other officers explored along the Orinoco river, seeking "El Dorado" (the Golden King), or his golden country—a glittering fairy-tale which lured Raleigh to his death in the next century. The story of El Dorado had some foundation in fact. The Incas had a religious ceremony in which their Emperor, smothered in gold-dust and jewels, dived into a sacred lake called Manoa, leaving the jewels to sink there. Other worshippers flung jewels and other treasure in after him as offerings to the god. The Spaniards got hold of a garbled version of the story, and believed that somewhere existed a king clad in gold-leaf and a country so rich that the commonest utensils of daily life were made of gold.

Portugal had divided into captaincies as much of the coastal belt of Brazil as she was able to govern, with Bahia as the central station. It is interesting to remember that William Hawkins, the father of the future Sir John, was trading to Brazil in 1530.¹ The Spaniard Don Francisco de Orellana navigated the whole course of the river Amazon in 1540-41, travelling down from the river Napo. It is a curious story. In 1536 Gonsalez Diaz de Pineda discovered the "Land of Cinnamon" (Canelos), in the country of the river Napo, east of Quito, in Ecuador. The Spaniards were already in occupation of Quito, an old native town which in the first place had belonged to a cultured people whom the Incas had conquered. The Incas had built a wonderful highroad from Quito to Cuzco, in Southern Peru. In 1539 Francisco Pizarro sent his brother Gonsalo to examine Pineda's discovery. He set out from Quito with 350 Spaniards (foot and horse), 4000 Indians, a herd of swine, and a flock of llamas. Don Francisco de Orellana was his lieutenant. They suffered extreme misery, and were reduced to eating not only their horses, but their saddles. When they came to the river Napo they decided to build a brigantine and make sail for it. They hacked down forest trees, used nails from their horses' shoes, or made them of any scrap iron they could find in their equipment, took their shirts and blankets for oakum, and obtained resin from the trees for tar. (There is really no reason why you should not believe, from the point of view of human probability, the whole story of the Swiss Family Robinson.) Into the brigantine they put all the gold they had collected and anything else of value, and their sick men. The rest kept

¹ He employed a French pilot.

to the bank, hacking their way through the dense growth. That went on for two months. At last a forest Indian made them understand that the Napo flowed into another great river ten days' journey ahead, where there were habitations and provisions. Gonsalo decided to send Orellana on with the brigantine to bring back food and revive them all, when they could decide upon the next move. The next move was decided by Orellana. He sailed into the great river, the Amazon, and made up his mind to go straight ahead. What was to become of the rest of the party left behind apparently did not weigh in his decisions. Some say he had permission to go on, but that is an unlikely story in the circumstances. At any rate, he sailed on, having skirmishes now and then with the natives, "whose wives came out and fought with their husbands,"¹ and in August 1541 he emerged at the mouth of the river. At Trinidad he bought a ship, and made haste home to Spain to report to the King; he was well rewarded.

Meantime the Gonsalo party had struggled back to Quito, which they reached in June 1542. Only fifty Spaniards (outside Orellana's small party) survived the expedition, and less than a thousand of the four thousand Indians "who served their masters like sons."

In Central America Cortés was established among the Aztecs, as you know, and settlers were coming into the country. Spanish officers were marching into the southern land of North America, not with much success from a material point of view, but leading the way. Hernando de Soto, marching from Florida, lost his life on the banks of the Mississippi. Francisco Vasquez de Coronado, seeking the apocryphal Seven Cities of Cibolo, found the great bison plains of the Missouri, and the Zuñi pueblos (curious native dwellings) in New Mexico. One of his officers discovered the Grand Canyon, and another officer, sent by sea to co-operate with de Soto, sailed up the Gulf of California into the river Colorado.

We must now turn to the East Indies, and trace the progress of events there after the return of the *Vittoria*. The *Vittoria's* company in her cruising among the islands discovered the Portuguese to be more deeply entrenched there than the

¹ According to some authorities, the Spaniards adopted the native name for this river, which means the 'boat-breaker'; according to others, they named it after the women-warriors of Greek mythology when they had seen the warlike character of the native womenfolk.

Spaniards had thought. Portugal had gone about her affairs giving away as little as possible. In 1525 Spain made an attempt to assert herself in the Moluccas. She wished to persuade herself that these rich spice islands lay upon her side of the line of demarcation. The fact remained that they were well within Portuguese territory. As a matter of fact, Magellan's line was wrong too, though the charted proof of this was not forthcoming until the English navigator Dampier proved it early in the eighteenth century. Spain was not to submit to the Portuguese claims without a struggle. Some of the *Trinidad's* men were still at Ternate, and, professing some anxiety on their account, she sent out Don Garcia Jofre de Loaysa, an old army officer, in command of a fleet. He was piloted by no less a man than Sebastian del Cano, formerly the captain of the *Vittoria*. Loaysa was to establish himself as governor of the Moluccas (there is nothing like taking the bull by the horns), and del Cano was to be his second-in-command. Alas for all these high hopes! The expedition was doomed to disaster. Sebastian del Cano's ship was wrecked on the Cape of the Eleven Thousand Virgins (Cape Virgines), and soon afterwards he died. Loaysa for a time lost touch with the rest of the fleet, and died soon after rejoining it.

A ship's pinnace, somehow separated from the fleet, was left to her own devices, and provided one of the stirring tales of small craft adventure which are dotted along the course of discovery. Through some miraculous combination of luck and seamanship she got through the Strait of Magellan, and up the west coast of South America to a point off the shores of Tehuantepec, in Central America. Her company could not bring the pinnace in, and she had lost her boats, so, in order to make contact with the shore, the chaplain volunteered to try his luck in a box. They tied it to the pinnace with a long rope, and off he paddled. The box capsized in the end, but near enough ashore for a handful of natives to drag in the half-drowned chaplain. Native canoes saved the rest, and the company marched inland and reported to Cortés just at the time that he received an order from Spain, where there was anxiety both about the *Trinidad*, which had not yet turned up, and about Loaysa, to send out a search-party. Two years had passed since Loaysa sailed. Cortés now sent off his cousin Alvaro de Saavedra. He was to find a passage from New Spain (as Mexico was called) to the Spice Isles, and to find any

traces he could of Loaysa and his people. This expedition had a wretched time too. The flagship sprung a leak almost at once, and they were pumping ship all across the Pacific. Another ship went down. Two were wrecked on the Sandwich Isles. (The story goes that the captain of one of them and his sister—women constantly travelled in the ships in those days—married natives, and were involuntarily the first European settlers.) Saavedra struggled along and came upon the Caroline Isles, which had been visited the year before by a Portuguese, Diogo de Rocha. He touched upon the north coast of New Guinea, where two years before a Portuguese, Don Jorge de Meneas, had been forced to seek shelter, and eventually he reached the Moluccas. On the Isle of Gilolo another ship had to be abandoned because it was rotten with barnacles. Here Saavedra made contact with the remnant of Loaysa's fleet. The Portuguese had taken the fort which his men had built at Tidore, and now the fight continued, Portuguese and Spaniard hanging and quartering each other at a great rate. In 1529 Saavedra refitted his ship and made for home. Bad luck dogged him. Storm and contrary winds racked him, and he died in his ship off New Guinea. The rest had to put back to the Moluccas, and it was years later that the remnant found its way home.

The Emperor Charles found himself bound to recognize Portuguese claims, and in 1529 sold whatever right he might be supposed to have in the Moluccas. For 150,000 ducats Portugal bought what was already her own. Nevertheless, in 1542 the viceroy of New Spain sent out an expedition commanded by Ruiz Lopez de Villa Lobos. The Philippines were still in question, and hopes of the Moluccas were not dead.

Villa Lobos fought the Portuguese in the Moluccas. In the course of operations one of his captains, Inigo Ortez de Rotha (or Retes), coasted along the north coast of New Guinea, and it was now that it received its present name. He found people there with frizzy hair, and was reminded of the negroes of the Guinea coast of Africa. He thought he had discovered the island, for, as remarks Galvano (who was a contemporary Spanish writer, and made a chronological list of discoveries to that time), "the memory of Saavedra then was almost lost, as all things else do fall into oblivion which are not recorded and illustrated by writing."

How often did that happen? 'Discoverer' often means not

the man or men who were first in a place, but the man who first charted it. Nowadays if the most minute island were discovered all the newspapers in the world would rush into print about it, and probably would produce a little map showing everybody exactly where it was. It would never be lost again. It was very different in the days when printing cost a great deal, and when, if a navigator survived to report his find, it might not be properly recorded, or the record might be lost in a mass of papers hidden away for years, or the means of substantiating the report might not be forthcoming.

Villa Lobos sailed from the Moluccas to the Philippines, or the Archipelago of St Lazarus, as Magellan had called it. The islands were known also (a fact significant of the argument about them) as the *Ilhas Orient* (by Portugal) and the *Islas Poniente* (by Spain). Spain regarded them as lying upon the extreme west of her territory, and Portugal as upon the extreme east of hers. Villa Lobos now christened them *Islas Filipinas*, after Philip, the Crown Prince of Spain. His voyage did little towards Spain's settlement in the islands.

Mexico sent out about this time at least two other navigators who are interesting. The viceroy had heard rumours of gold-bearing isles in the mid-Pacific. He sent out Grijalva and Alvarado. Mutineers murdered Grijalva, and his ships were wrecked somewhere near New Guinea. Only seven of the crews managed to survive and years after were ransomed from the natives who held them as slaves. In 1555 Juan Gaetano, who had been pilot to Villa Lobos, discovered the Hawaiian Isles, which he called *Islas de Mesa*. No account of the voyage survives. Madrid has but the bare statement; but, according to native tradition, a vessel was wrecked on the isles at this period, and two of the crew survived, whose blood flows in the veins of Hawaiian families to-day. Nobody did anything about the islands until Captain Cook rediscovered them, and there lost his life. It was not until some twenty years after Villa Lobos's voyage that Spain established herself in the Philippines.

In the meantime I must tell you of a voyage which was undertaken by two Englishmen, and of an effort at colonization on the Atlantic seaboard of the southern part of North America by France.

CHAPTER XIX

ENGLAND LEADS—FRANCE FOLLOWS

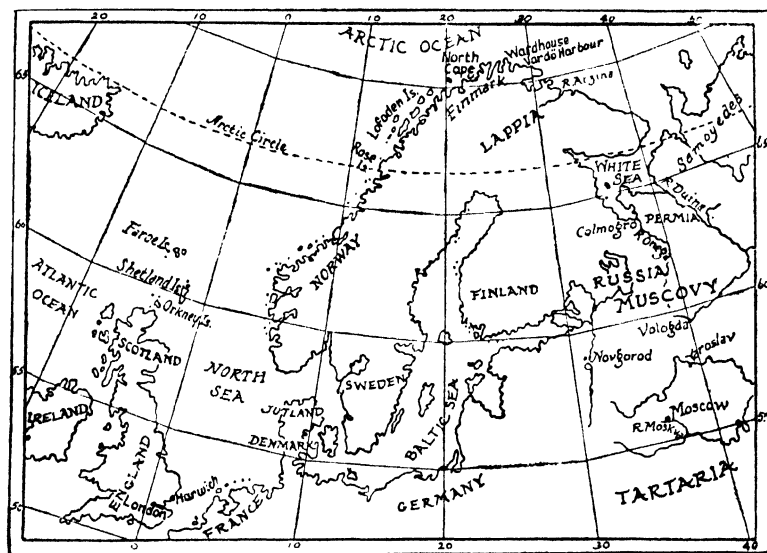
THOUGH English seamanship was rapidly approaching the greatest efficiency, English seamen had made no effort to seize any part of America or the Indies. England was friendly with Spain; indeed, a queen of England was soon to marry the heir to the throne of Spain. Nor did England show any desire to challenge France's claim to the long and still empty eastern coast-line of North America. As a whole she knew little about America, though English merchants lived in Seville, and several of them had an interest in West Indies adventures. Among these was Roger Barlow, who sailed as supercargo¹ in Sebastian Cabot's flagship on his voyage to La Plata. About ten years after his return from La Plata Barlow wrote a book on geography which was partly original and partly a translation of a book written in 1518 by Martin Fernandez Enciso, who financed Ojeda, and who possessed as complete a knowledge of the West Indies as any man of his time. Barlow's book was presented to Henry VIII, but it was only in the year before Queen Mary came to the throne that an Englishman succeeded in thoroughly arousing the interest of his countrymen in the New World. His name was Richard Eden, and he published an account of the New World translated from the work of a German geographer. Eden urged Englishmen with all his might to make an attempt to win some hold there.

The only response at the time to this talk of wider adventure was an effort to find a north-east passage to Cathay. Englishmen had discussed such a proposition years before, when Henry VIII had approached the merchants of London asking them to finance an expedition under the command of Sebastian Cabot. But the merchants did not trust Sebastian, and said so. There is no doubt that Sebastian was a dishonest man. He might have used English funds for the expedition, and then sold the resulting information to the highest foreign bidder. So nothing came of it, though Sebastian seems to have suffered no ill-effects from this slight upon his integrity. Now, in 1553

¹ The officer in charge of the ship's commercial transactions.

Sir Hugh Willoughby and Richard Chancellor¹ offered to make the attempt, and it was Sebastian who furnished them with instructions and advice for the voyage. The young King Edward VI entrusted them with letters to "the Kings, Princes, and other Potentates, inhabiting the North-east partes of the world, toward the mighty empire of Cathay."

For Willoughby the voyage was completely disastrous. The



WILLOUGHBY AND CHANCELOR'S DISCOVERY OF THE WHITE SEA
AND MUSCOVY

ships became separated, and he and his company were frozen to death trying to winter in Russian Lapland. Chancellor managed to reach the White Sea (already known to traders) and to land at Archangel. He travelled overland to Moscow and interviewed the "Duke of Moscovie," and safely reached home again. His voyage bore fruit, for he had some success in establishing trade relations. His visit to Russia also broke the monopoly of trade which the Hanseatic League had established in its northern ports. The Muscovy Company of Merchant Adventurers was founded in London, and Sebastian Cabot was made governor of the company.

In a few years' time we find Queen Elizabeth in the first

¹ Chancellor was the first fully trained English pilot.

year of her reign giving letters to Anthony Jenkinson asking for a safe-conduct through Russia while he was consolidating the Russian connexion on his way to Persia. Chancellor's description of what he saw of backward Russia is very interesting, and we shall refer to it again later. But the North-east Passage itself as a practical proposition was henceforth abandoned by Englishmen. In 1555 Eden further increased English interest in America by translating part of the *Decades* of the historian Pietro Martire d'Anghiera, known as Peter Martyr, an Italian scholar who went to Spain, and whose work was published in Latin at Seville in 1511. The part which Eden translated dealt with the discovery of the New World from Columbus to the conquest of Mexico (1492-1519).

In 1554, when Philip came to England to marry Queen Mary, a long procession of heavily laden pack-horses carried treasure to the Tower of London as an earnest of what might follow a close alliance between the two countries. It whetted the Englishmen's appetite more than anything Eden could write, and when Protestant Elizabeth came to the throne, and Philip's furious treatment of the northern and Protestant half of the Netherlands led her to show sympathy with the Dutch, Drake led the way to the Spanish treasure-holds and to the downfall of Spain.

The next three voyages and efforts at colonization were a direct outcome of the wars of religion on the Continent, and were undertaken by French Protestants between the years 1555 and 1562. These colonists were the first to leave their native country to find rest from religious persecution.

The Protestant Reformation, as we have already noted, was followed by the Counter-Reformation. The Roman Catholics, having done much to purify their Church from within, formed a Catholic League for the protection of their creed. The best men among them knew very well that their Church had left much room for reformation, but they felt that to shatter the authority which had so long directed the spiritual life of the people was a mistake, and they hoped for some compromise which would save the ancient Church and stop the unending bloodshed into which the wars of religion had led them all. There were also many men who were for no interference, or for as little as possible: the Church should dictate as it had always done; and this element, and the element of intolerance among the Protestants, were those which prolonged the struggle.

One of the most important instruments of the Counter-Reformation was the Society of Jesus, whose members became known as Jesuits. The order was founded about 1532 by a Spanish nobleman, Don Inigo Lopez de Recalde, known to the world as Ignatius Loyola. He had been crippled in the wars,



EXTENT OF THE REFORMATION, 1524-72

From "Early European History," by Hutton Webster (D. C. Heath and Co.)

and now, unable to take an active part in the field, he determined to fight in the service of the Church. He gathered round him an enthusiastic band of nobles. They decided in the first instance to go upon a pilgrimage to Jerusalem, but the Turk was too determined a barrier, and they got no farther than Venice. Loyola organized his company like an army. He required the strictest discipline. Nationality was unrecognized; men of ability and faith from any country were enrolled. They offered themselves to the Pope for whatever service he required.

At first the Pope was not enthusiastic, but in 1540 he officially recognized the order, and it became an enormous force. When you come to study the history of colonization in North and South America you will hear much of the Jesuits. They were soon out in the colonies, in India, and seeking hospitality in China and Japan. In 1549 the Jesuit Father Francis Xavier, who had already worked in India, founded the first mission in Japan; and he died on the island of Chang-chuen-shan (St John Island), off the coast south of Canton, where he had persuaded a smuggler to take him in the hope of gaining admittance to China. After his death a brother Jesuit gained permission to enter China—welcomed not for his religious views, but because he was a brilliant man (as was St Francis), and could be, like the Jesuits in later years, all things to all men. It was the Jesuits who taught China that, however advanced she might have been in earlier days, Europe had outstripped her now; and the mandarins, even the Emperor himself, eagerly absorbed European views on matters of science, mathematics, mechanics, astronomy, even upon art. It was the Jesuits too who, at the order of the Emperor, surveyed China, and taught the Chinese themselves how to perform the work. The result was a better map of China than any that existed of Europe. Some of the most brilliant men of the age entered the Order of the Society of Jesus. They founded schools, and sent their eloquent preachers to move men wherever the battle was thickest in the war of religion. As one writer has expressed it, "The Company was a sword held over Europe, the hilt of which was always in the Pope's hand, while the point could strike anywhere."

The Council of Trent was another weapon of the Counter-Reformation. The council was called at the suggestion of the Emperor Charles in 1545. Trent was a town within his domain but geographically in Verona. He hoped that here Roman Catholicism and Lutherism might find a compromise. But it failed.

The Inquisition was the third weapon. People generally believe that the Inquisition was invented in order to torture Protestants. This is inaccurate. Most of its victims were Moors and Jews. From time immemorial there had always been some machinery for punishing heresies, and torture was a method used in the course of ordinary justice everywhere. In 1483 Spain had established special Inquisitorial courts for the

suppression of the Jewish and Islamic heresy in the Peninsula. Later the Inquisition spread beyond the frontiers of Spain, but even in Catholic Europe there were countries where it was not applied, and it was always political rather than religious in character.

In 1555 affairs had reached such a pitch that the Emperor Charles was utterly worn out. He made up his mind to abdicate. He would leave to his son Philip Spain, Milan and Naples (to which by this time Spain had firmly established her claim), the Netherlands, and his domain in the New World. To his brother Ferdinand, the King of Hungary and Bohemia, he would leave his troublesome Germany and the title of Emperor. At Augsburg in that year, after fighting between Protestants and Catholics, he made a last effort to compose the differences of religion in Germany. Germany was divided up into about three hundred states, each with some independence in government. He suggested that there should be only two forms of worship—Roman Catholic and Lutheran. Each state should decide to which creed it would belong. The individual should have no freedom of choice, but he should have the right to emigrate into another state, and anybody who would agree to neither "should be outside the present peace."

He meant well, but as Calvinism was gaining hold in parts of Germany, as well as in its native country, the 'peace' began fresh troubles, which incidentally led in the next century to the Thirty Years War.

In France at this time the most bitter feeling prevailed. The Roman Catholics were stronger than the Protestants, and had just won another victory in the civil war to which this feeling had led. Admiral Coligny, who was to meet his death in the Massacre of St Bartholomew seventeen years later, was the Protestant leader. In 1555 Nicolas Durand de Villegagnon, a Knight of Malta living at Nantes, heard talk of "a transatlantic refuge for Protestants." French seamen were already trading to Brazil (Villegagnon himself had done so), and persecuted Huguenots¹ had joined captains who were privateering against Spanish commerce. These expeditions were a means of checking the supply which gave Catholic Spain the wherewithal to keep up her wars against the Protestant faith of these Frenchmen, as well as against their country. Villegagnon

¹ Protestants were dubbed 'Huguenots' in France, perhaps from the word *hugues*, a goblin.

decided to try to make a settlement abroad. He chose a little island near the entrance of the Bay of Rio de Janeiro, about two miles from the mainland. He hoped that by avoiding the mainland he would be safe from Portuguese aggression, for, you will remember, the Portuguese had claimed this coast by virtue of Cabral's visit and the fact that it fell within their line of demarcation, and they were now colonizing there. Unfortunately, Villegagnon was as intolerant in his own way as any Roman Catholic. He quarrelled with his fellow-settlers on points of creed, disciplined them violently when they refused to attend church, and thanked God when an epidemic visited the unfortunate Roman Catholic Portuguese on the mainland. At last his own people took refuge on the mainland. Some of them found their way back to France in the trading ships, and while Villegagnon himself was in France seeking fresh recruits the rest of the colonists were murdered by the Portuguese, who had built a fort, the nucleus of the town of Rio de Janeiro, for the express purpose of keeping Villegagnon's people out of the place.

In 1562 civil war broke out again in France, a flame lit by the Duke of Guise, who, passing with his men through the village of Vassy, broke up a Calvinist service and slew the worshippers. Coligny procured permission from the King, Charles IX, to establish another colony of Huguenots. This party was led by Jean Ribaut, of Dieppe, and after cruising a little about the southern coast of North America they chose a spot in what is now South Carolina, near the town of Beaufort. Ribaut set the settlers to work upon a fort, which they called Charlesfort after the King, and then himself set sail for France on the understanding that he would send out supplies. No supplies came. The settlers quarrelled and assassinated their captain because they resented his severe discipline. They then built a pinnace and tried to get back to Europe, but had to give up the attempt. While putting back to Charlesfort they happily fell in with an English barque which had on board an Englishman who had sailed with Ribaut. The barque rescued the party, and took to England those who were well enough to stand the voyage.

In 1564 Coligny sent his kinsman René de Laudonnière to see if he could improve upon Ribaut's effort. Laudonnière chose the mouth of St John's River, in the north of Florida, and built Fort Caroline. His colonists were a rough lot, and

had among their number many men who had been pirates. They soon set to their old business when they found themselves so near the West Indies, where the brotherhood of pirates already had a happy hunting-ground. Others joined Indian chiefs and went on the war-path. The remainder of the colonists were put to desperate shifts for provisions, and had not our friend John Hawkins, who had begun his slave-trading experiments from the coast of Guinea to the West Indies about this time, passed that way and given them provisions, their end might have come sooner than it did. It came soon enough. In 1565 the Spaniards, with some reason, destroyed what had become nothing but "a mere den of pirates." They built a fort of their own, St Augustine, to guard their possessions, for the discovery of Florida was indeed an addition to their laurels. They had made some attempt to explore it and even to colonize it. Their intention was also to keep out 'heretics.'

In 1572 occurred the most terrible episode of the civil war in France. This was the massacre on St Bartholomew's Day in Paris, when Coligny, among several thousands of Protestant people, lost his life, and when the Spanish envoy wrote home in glee, "Not a child was spared. Blessed be God!" Protestants were not allowed to emigrate to Eastern Canada—New France; and the Huguenots were too crushed for the time being to think of other ventures abroad.

In the next chapter I must tell you about several Spanish voyages of much importance, and then we shall pass to the events which made England and Holland the great sea-going nations of the world. The religious controversy was at the root of the Dutch bid for freedom, and it was partly the cause of Protestant England's challenge to Spain which culminated in the destruction of the Spanish Armada.

CHAPTER XX

SPANISH NAVIGATORS IN THE PACIFIC

You have seen Spain very much occupied with home affairs, and it was not from Spain itself that our special navigators sailed. The viceroys in Mexico and Peru had orders to conduct voyages of exploration across the Pacific from their own ports, which was a wise and natural plan.

In 1564 the Viceroy of Mexico set about the Philippine question again by sending out an expedition commanded by Miguel Lopez de Legaspi. He took with him missionaries and men enough to start a settlement, and he succeeded in his plan, though not without trouble from both native islanders and Chinese. In 1571 he founded the city of Manila (a name derived from a local weed or scrub called 'nilad'), destined to become the Spanish metropolis of the Far East. From this town were to sail to Acapulco, the port of Mexico, the galleons laden with treasure from the Spice Islands and China, for which pirate and privateer would lie in wait, and so provide many exciting chapters of sea history.

In 1565 Andres de Urdaneta, a geographer as well as a sailor, set out to discover what other men before him had tried to discover, and that was the safest and speediest passage from west to east across the Pacific. It was a question of understanding the trade winds in these parts. He mastered this question, and his route became known as 'Urdaneta's Passage,' and was used as the regular ships' route. Urdaneta was the Spanish Hippalus, who did for that part of the Pacific what Hippalus had done for the navigators in the Indian Ocean centuries before.

Another interesting and successful experiment in the same subject was undertaken about this time by Juan Fernandez, who sought to solve the problem of the winds which impeded coast traffic between Peru and Chile. He stood out to sea and found he had solved the problem, making the journey in such record time that the authorities more than half suspected him of witchcraft. In the course of this experiment he discovered (1563) the group of islands which is now called after him, and the largest of which has figured so much in romantic literature.



SPANISH CARRACKS AND GALLEONS
From a print in the Sicca Museum, South Kensington

He himself called this island Más-á-tierra, which means 'Nearer Land.' In 1572 the Viceroy of Peru gave Fernandez permission to colonize it. He took over a party, some cattle, and a herd of goats (the descendants of which clothed Robinson Crusoe), and he traded with salt fish and seal-oil to the mainland. But the project was not a success. He handed it over to a friend, who in his turn gave it to the Jesuit body in Peru. Nothing came of that either, and thereafter goats and pirates took it for their own.

Peru had been behind Mexico in ventures across the Pacific. She had been embroiled in civil wars. But in 1567 her Viceroy sent out from the port of Lima (Callao) an expedition which was of real geographical importance. It was almost the last voyage of ocean exploration performed by a Spaniard of the old school, or, for that matter, by a Portuguese, so soon were the rapid events in Europe to cause the decline of the Peninsula people. A variety of causes was at the bottom of the expedition. In the first place there was a story among the Peruvian natives that one of their Incas, Tupac Yupanqui, had sailed westward and found islands (actually the Galapagos), whence he brought home slaves, gold and silver, and a copper throne. That in itself was enough for the Spaniard. *Gold!* Pedro Sarmiento de Gamboa (whom you will meet again) had interested himself in Inca traditions, and believed he could locate these isles. He approached the authorities. His reputation was under a cloud at the time, and a voyage would be a welcome interlude. The authorities lent an ear to his project. There were not a few restless spirits whom they would be glad to pack off for a little while; and something might come of it.

There was also another reason why they encouraged this venture. A great geographical problem had begun to occupy men's minds. Navigators had reached as far south as the Magellan Strait and found land (Tierra del Fuego) still to the south. They had sailed along the north coast of New Guinea, and knew not whether it was an island or part of a mainland. There were rumours of land south of the Moluccas; men had been wrecked there. Moreover, there is reason to believe that the Portuguese had actually discovered part of Australia, certainly before 1542, and probably between 1511 and 1529; and the information had leaked out. There is a story of a renegade Portuguese bishop who made over some secret papers to France in 1542, when he was passing through on his way to Rome to

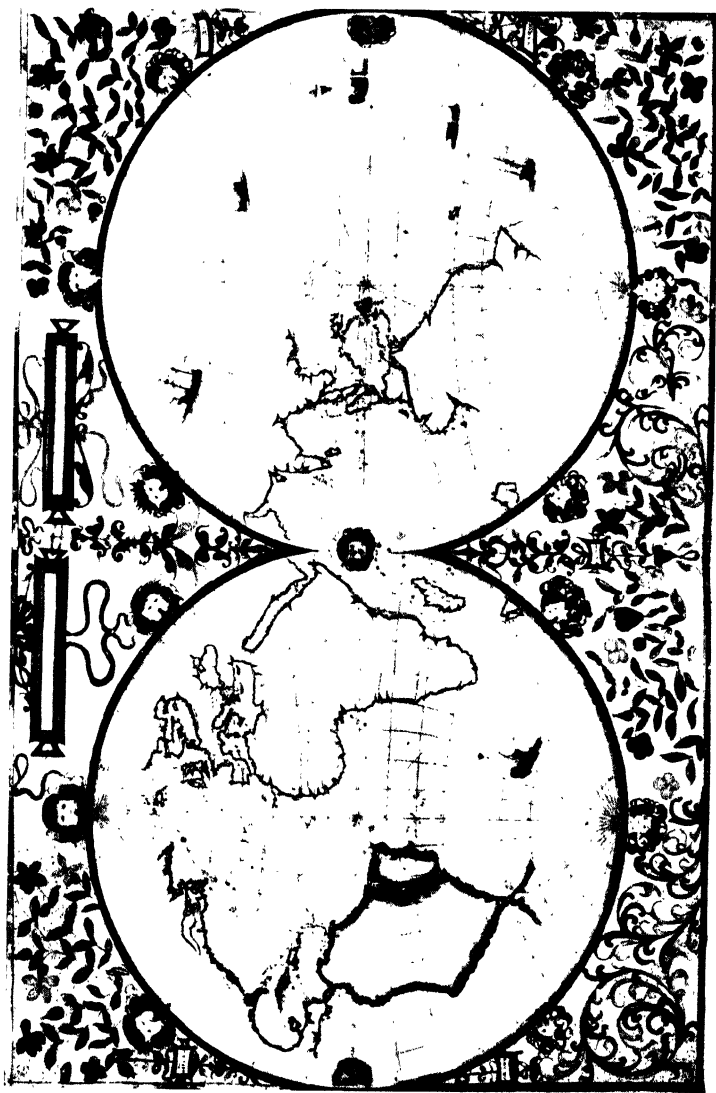
get his cardinal's hat, and of charts that were copied in France which showed a coast-line in latitudes which could mean none other than Australia's. At any rate, the scandal was sufficiently serious for the bishop to be outlawed. In the same year Jean Rotz, a Frenchman, entered the service of Henry VIII of England. He made two maps for the King, and he too drew a sweep of southern coast-line indicating a great south land.¹ In 1546 a map presented to the Dauphin of France showed it. There were other maps. Some revealed New Guinea as part of the mainland of this south land; others showed a narrow strait, and marked an island on either side of it—Great Java and Little Java. It is probable that the Chinese contributed to the rumour. Marco Polo had told of two large islands beyond Java. He called them Sondur and Kondur.

What, then was all this? Did a great Antarctic continent lie south of the routes the little ships had found? The Peruvian officials thought it possible that Yupanqui's isles might be mainland and yet another indication of continental land. Their expedition might fall in with this great Antarctic continent at some point. So they gave instructions that if this occurred the commander was to settle there with a certain number of his company, and send the ships home with reports and for reinforcements.

The command was not given to Sarmiento. He seems to have been a fine sailor, but, like Magellan and like Dampier later, to have suffered from a lack of the qualities of leadership and the tact which makes for a contented following. He sailed as navigator. The Viceroy gave the command to his nephew, Don Alvaro de Mendaña de Neyra. Mendaña was only twenty-five, Sarmiento thirty. We are told that "the official excuse for the expedition was 'to convert all infidels to Christianity,' but that the real reason was conquest and spoliation." Why the authorities should have thought it necessary to make this excuse at all is difficult to understand. It created a precedent whereby an expectant world might look for an apology for most of the works of officers in Peru. It may have been to placate the missionaries who were already doing their best to uphold the orders from the home Government that natives were to be treated as human beings.

Sarmiento was sure that the isles he sought were only five hundred leagues from Peru, so thorough had been his investiga-

¹ The original map is in the British Museum.



THE WORLD, DRAWN IN 1542 BY JEAN ROTZ, HYDROGRAPHER TO HENRY VIII

It has been contended that this map shows Australia

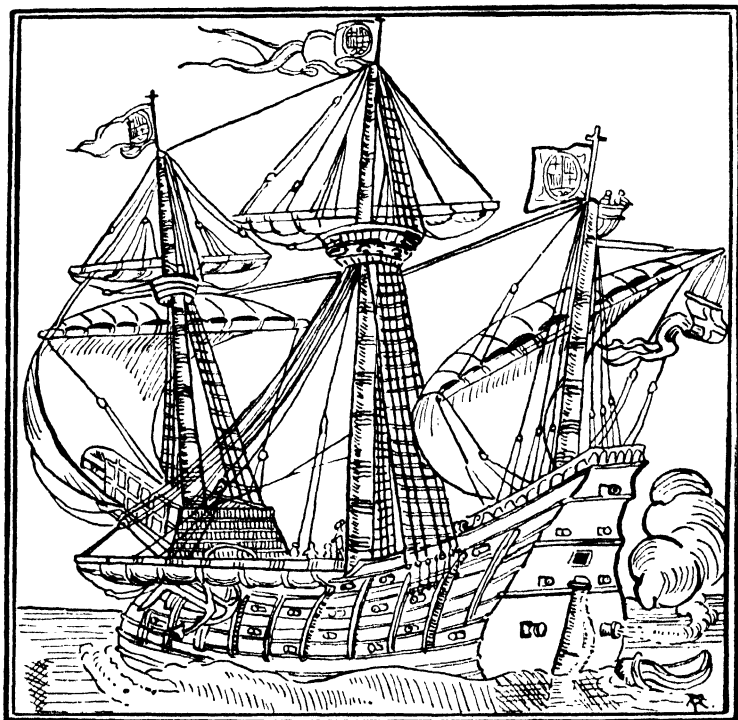
From a manuscript in the British Museum

tions of native lore. This conviction had an unhappy effect, for the ships were insufficiently provisioned. They sailed from the port of Lima in November 1567, and the first islands they discovered were the Ellice Islands (January 1568). In February they discovered the Solomon Isles, and here they spent six months. They found no gold. The natives were a dangerous lot, and looked it, for they bleached their hair with lime and smeared their faces with red clay. They were unwilling to barter with the ships and produce provisions. Mendaña definitely tried to conciliate them at first, but Sarmiento and the rest were all for taking what the natives would not sell. They also kidnapped a man and the child of a chief. The natives retaliated by capturing and eating a boat's crew. There was no settling here! Sarmiento was sure the land they really sought was to the south-east, but they were in no condition for further adventures other than the voyage home, if, indeed, they were destined ever to get there.

Somehow both ships got home safely after nineteen months and after having been reduced to such straits that the men gambled for each other's minute allowance of water. They had taken a northern course on the way home and sailed through the Marshall Islands, discovered Wakes Isle, and put in on the coast of California. They brought home a native family as slaves. Peru was not impressed. What about that gold? Mendaña had to pawn all his possessions to pay the shipwrights. He was nothing daunted, however. He might not have found a continent, but he had found several perfectly good islands, and he proposed to colonize them.

As we shall be very busy presently with the affairs of Holland and England, I will carry Mendaña's story to the end. Intrigue persistently prevented him from pursuing his ambition. He had enemies, and could not succeed in procuring either the permission or the support of the authorities. He pegged away for years, and then another element entered into the argument. Francis Drake found his way into the South Seas, and the Spanish Government had other reasons for avoiding colonization in the Pacific. We hear, "When they thought to have sent colonies [*sic*] into these islands Captain Drake entered the South Sea, whereupon commandment was given that they should not be inhabited, that the English, or others who pass the Straits of Magalhaes to go the Moluccas might have no succour there but such as they got of the Indians."

It was not until the end of the century, in 1595, that Mendaña got his way. He was given the title of marquis, and sailed with his wife and three or four hundred colonists. His pilot was Pedro Fernandez de Quiros, a Portuguese and a cartographer of note. The employment of a Portuguese is explained by the



SPANISH SHIP, 1592

From "The Sailing-ship," by R. and R. C. Anderson (Harraf)

fact that in 1580 King Philip of Spain established a claim, by virtue of inheritance through his mother, to the Portuguese crown. For sixty years Spain and Portugal were united, much to Portugal's disgust. Both men were in this sense Spanish subjects.

Tragedy awaited the expedition. On the way out they discovered the Marquesas Islands, but they failed to locate the Solomon Isles again. They discovered instead the Santa Cruz Islands, north of the New Hebrides, and there Mendaña decided

to found his colony. Within two months he was dead. He had sailed a sick man. Quarrelling and disease did their deadly work among the rest with horrible speed. One or two of the ships set out to see if they could better their position and did not return. Quiros and Mendaña's young widow, with the remainder of the crews, decided to abandon the colony, and Quiros brought his ship in a sinking condition to Manila, in the Philippines.

As for the Solomon Islands, they were lost for a couple of centuries. Even the Spaniards themselves ceased to believe in their existence. We are not even quite sure where the name came from. No gold came from there, yet the tradition of gold-bearing islands in the Pacific died so hard that somehow these particular islands, while their existence was still accepted, came to bear Solomon's name, because here perhaps was where he got his gold! The land of Ophir has indeed become translated. In 1587 a map showed them in a fairly correct position. After that they became confused with other islands. The famous French map-maker of the eighteenth century, D'Anville, did not mark them at all. In 1769 Captain Philip Carteret, on one of the expeditions sent out by the British Government to explore the Pacific immediately preceding Captain Cook's, came across them; he thought they might be the Solomons, but doubted it. It was the French who finally solved the mystery—partly by research among Mendaña's unpublished records, which proved their identity conclusively, so full and exact were his descriptions of bays and headlands and so forth. Had Mendaña's reports been published in his own time for the benefit of the world in general, the old maps would have been the richer, and would have saved later navigators a good deal of trouble. But, as we have seen again and again, geographical discovery for its own sake was not part of any nation's programme in the early days. If the nations had pooled the fruits of their dauntless spirit we should all have got on much faster.

CHAPTER XXI

HOLLAND MAKES A BID FOR FREEDOM AND DRAKE SAILS ROUND THE WORLD

THE year 1567, when Mendaña sailed on his first voyage, heralded the rise of the Dutch to independence, and the story of how they found their sea-legs is the story of Spanish aggression. The story of England's rise to supreme sea-power is the story of a struggle against that same aggression, though England in the first instance was by no means the blameless victim that the Netherlands were.

It will be the end of the century before the Dutch make their first bid for direct trade with the Far East, but we must set them on their way before we follow the course of England, not only that we may remember their very active existence and be able to take up the thread more easily later on, but because they will cross our path to some purpose in the story of English affairs.

You will remember that when the Emperor Charles abdicated he left the Netherlands as part of his son Philip's inheritance. The Netherlands were divided into seventeen provinces, each of which had its own independent Constitution. There was a double division, for the northern provinces were of different stock from the south. (By south is meant south-west if you are looking at a map of the Continent.) The north spoke a German dialect, the south a French dialect. The northern provinces, of which Holland was the most important, had a strong Protestant majority; the southern, which to-day compose the Kingdom of Belgium, and of which Flanders is the most familiar in history, was for the most part Roman Catholic. Both north and south had on the whole been loyal to the Emperor Charles. He had lived in the Netherlands in his youth, and understood the country, managing to keep in check Protestantism and the democratic spirit which, born of an exceedingly wealthy merchant class, was stronger in the Netherlands than anywhere in Europe.

Troubles began immediately the fanatical Philip took over his inheritance. The Netherlands naturally wanted one of their own people appointed as Regent. William of Orange-Nassau,

who has come down in history as William the Silent, was one of their nominees, and a very reasonable one too. Orange was of German (Rhineland) origin. The principality of Orange from which he took his title was in French territory, and had come to his family through the female side; but he owned a good deal of property in the Netherlands, and considered himself a Netherlander. He had been a favourite of the Emperor, and though he later changed his religion for the sake of tolerance and his country's need, he had been brought up a Roman Catholic. There was no love lost between Philip and William, but Philip had made him the Stadtholder (governor) of Holland, Zealand, and Utrecht. There, however, he evidently decided his favours should end. He would have none of the Netherlanders as Regent. He appointed his half-sister Margaret, the Duchess of Parma, which meant, of course, that Spanish councillors held the reins. Then he started his campaign

against Protestantism by announcing that he would appoint certain new bishoprics. The Netherlands argued. Among the loudest in protestation were Orange, the Count Egmont, and the Admiral of Flanders, Philip de Montmorency, Count van Hoorn. Another was the brilliant Philip van Marnix Sainte-Aldegonde, who in the course of subsequent events wrote the Dutch national anthem, *William of Nassau*. King Philip retaliated by sending a relentless soldier, the Duke of Alva, to reduce the country to submission. Alva instituted a council for the trial of treason and heresy. The Nether-



PHILIP II

A portrait of the King at the age of twenty-four
by Titian

Prado Museum, Madrid

From "*Medieval and Modern History*," by Hutton
Webster (D. C. Heath and Co.)

landers called it the 'Council of Blood.' He executed Egmont and van Hoorn, and kidnapped William's eldest son from the University of Louvain, where he was studying, and sent him to Spain. William, warned in time (for one of King Philip's secretaries was a spy of his), fled before Alva arrived.

In two years the country seemed cowed. It was not cowed, however, and an incident in which Englishmen were involved brought the simmering passion to a head. England was not officially at enmity with Spain. It did not suit Queen Elizabeth just then to bring about a rupture, but her people for some years had upon one excuse and another robbed Spanish shipping and Spanish ports in the West Indies and on the Spanish Main. Drake and John Hawkins had challenged the Spanish monopoly of trade in at least three voyages. Alva aggravated the situation in the year 1568, for he seized a hundred thousand pounds' worth of merchandise in English warehouses at Antwerp. (The English Company of Merchant Adventurers employed something like fifty thousand people in the Netherlands, and had their headquarters at Antwerp and Bruges. Now they were obliged to move; Hamburg refused to admit them, and they went to Emden, which flourished to such an extent in consequence that Hamburg came to repent its jealous inhospitality.) In an encounter on the voyage from which Drake and Hawkins had returned in January 1569 Hawkins had lost a ship which he had hired from the Queen herself, and his version of the story had fired both the Queen and her subjects with indignation—quite unjustifiably, but so it was. William Hawkins, John's brother, was the Mayor of Plymouth and a wealthy shipowner, and he had ships in the service of the Prince of Orange operating in the Bay of Biscay for the purpose of waylaying Spanish vessels coming with troops and provisions and merchandise to the Netherlands. He succeeded in capturing ships which carried the wherewithal to pay Alva's army. He drove them into an English port, and advised Elizabeth to claim the money in payment of her own lost vessel. Elizabeth did this, and Alva retorted by levying a tax upon the Netherlands to pay his men. This was altogether too much for the independent northern states: they fiercely rebelled. The southern provinces were kept in check—they were always amenable—but never again did the northern provinces submit. Led by William of Orange, fighting with their backs to the wall, they stood up against odds which seemed

impossible to overcome. At one time, when the Spanish troops mutinied for their pay and plundered Protestant and Roman Catholic towns alike, the north and south united against the common foe, but intolerance on both sides about religious matters and lack of success in war soon laid the southern provinces by the heels again. They were defeated by Don John of Austria, half-brother of King Philip and the hero of Lepanto,¹ in co-operation with Alexander Farnese, Prince of Parma. They also fell to the lure of certain concessions, and left the gallant north to battle for nearly half a century. In the end the Northerners founded the Dutch nation. William the Silent lived to lay the foundation-stone of this young nation, and then he was assassinated, probably at the instigation of Philip, who rightly judged that the courage and genius of William were the inspiration of the rebellion, and had long set a price on his head.

Dutch sea-power had its origin in the earliest days of the struggle. In 1569 some of the younger and wilder spirits gathered round them adventurers of all nationalities. These men had one bond between them—a hatred of Spain and the Papacy, and they took to the sea in the determination to cut off the Spanish from their sea-route to the Netherlands and to plunder their shipping. They persuaded William of Orange to give them letters of marque² as evidence that they were not mere pirates. He was rather unwilling to do so; he feared violent methods which might harm rather than help the cause. However, in a very short time, and by the most violent means possible, they had got together a very presentable flotilla. They were popularly known as the Sea Beggars. The word ‘beggars’ came to be attached to them from an incident which occurred in 1566. A party of Netherland nobles marched through the streets of Brussels and presented to the Regent Margaret of Parma a petition which they called a “Request” and which caused the Regent some anxiety. One of her councillors heartened her by suggesting that surely she was not afraid of “these beggars.” The name stuck.

The Sea Beggars’ difficulty at first was a need of ports where they could put in and refresh and reprovision. Queen Elizabeth allowed them to use English ports until Philip vigorously

¹ The battle in which Don John, commanding a Roman Catholic force of mixed nationality, destroyed the Turkish navy.

² A commission from a king or Government to a private person allowing him to undertake reprisals against another state.

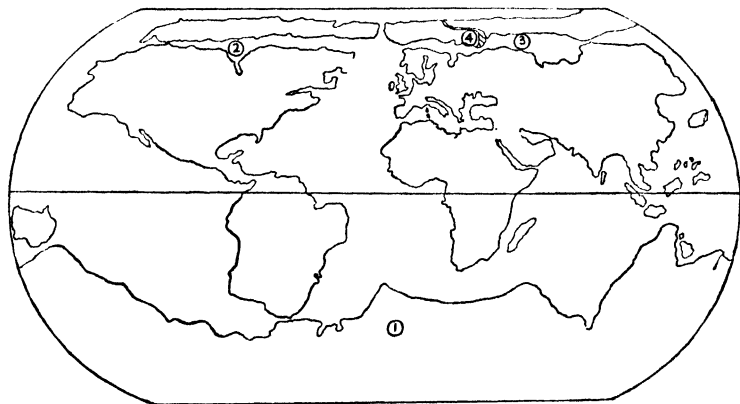
protested, and she was obliged to withdraw her hospitality. She was probably comforted by the thought that Drake was out in the West Indies again. Incidentally he captured on this voyage (1572-73) the mule-train carrying the treasure along the gold road across the Isthmus of Panama. The Beggars set about capturing a port on their own coast-line. They took and held Brill and Flushing, and after that there was no stopping them. The Dutch were to grow into a maritime Power not second even to England.

There was another very interesting development going on now in the Netherlands of which we must make a note. In spite of the ravages of war the arts and sciences made headway, and notably, in our particular interest, they led the way in map-making. In the first instance the map-makers were indebted to the courtesy of Spain for charts and information. That was natural enough, but it was the Netherlanders themselves who emancipated cartography from the long sway of Ptolemy and founded the science of modern map-making. Their first two cartographers of importance were Flemings of German parentage. Possibly their parents were Calvinists who left Germany when the Augsburg 'Peace' came into force; but that I am not sure about. The name of the first was Kremer, and he called himself Mercator. He made a map of the world on the method of projection invented by an English mathematician and map-maker, Edward Wright, but known to us under Mercator's name. He issued two revised versions of Ptolemy's map during his lifetime. After his death in 1594 his son published Mercator's now famous atlas. The other man was a friend and contemporary of Mercator. His name was Abraham Ortelius, and he is known to us as Ortelius. In 1570 he issued the first edition of his *Theatrum Orbis Terrarum*. This was the first 'atlas' ever published. Mercator was responsible for the word 'atlas,' borrowing it, as you know, from the Greek myth of the giant who supported the globe on his shoulders. The idea of binding maps into a book was originated by a rich merchant named Hooftman, who collected maps and realized that it would be much more convenient to bind them flat into a book than to keep on rolling and unrolling each separate map. He asked Ortelius to bind his collection, and when Ortelius published his own maps he did it in this form.

In the atlases of Mercator and Ortelius New Guinea is shown as an island with a strait between it and Terra Aus-

tralis, the supposed southern continent. Yet we have no historical record of any ship's passage through this strait, nor of the proved presence of continental land on the other side of it until many years after the publication of these atlases.

The Dutch also excelled in map-printing from an artistic point of view. The maps were engraved, coloured by hand, and decorated with delightful pictures of ships, native people, and instruments of navigation. The script in which the names



OUTLINE SKETCH OF THE WORLD MAP OF ORTELIUS

Note the great southern continent, called Terra Australis Nondum Cognita (1); the North-west Passage (2); the North-east Passage (3); and Novaya Zemlya (4). A number of islands in the West Indies and elsewhere have been omitted.

From "*A History of Geographical Discovery and Exploration*," by J. N. L. Baker (Harrap)

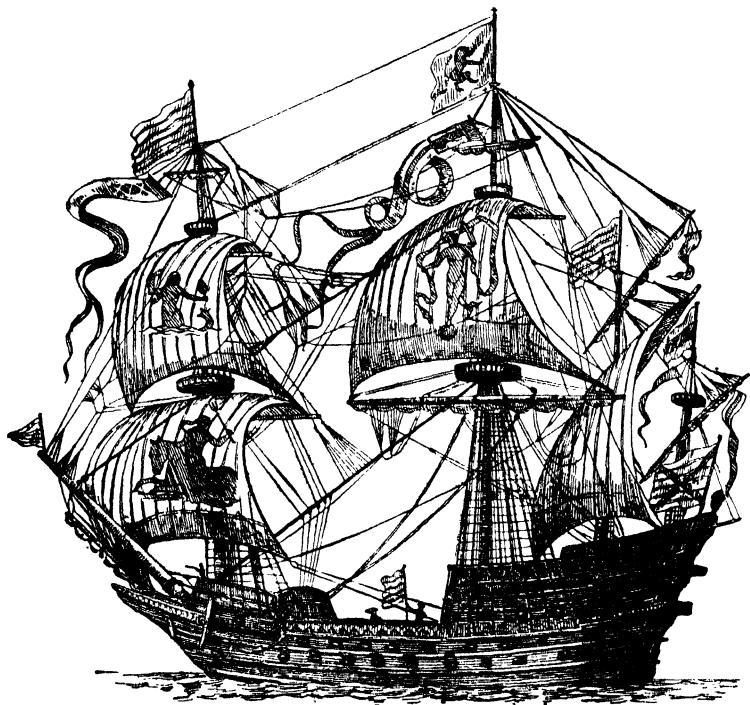
were written was perfect. Many maps designed by men of other nationalities were engraved by Dutch artists. In 1579 Christopher Saxton designed the first important atlas of English county maps; most of them were engraved in Holland. At the end of the sixteenth century Cornelis Wytfliet, a Dutch geographer, published his work. He is especially interesting as having expressed the opinion that when the suspected South Land was found it would prove to be the fifth part of the globe.

Now, while the Dutch are fighting for their nationality and progressing towards the time when they will produce their distinguished seamen, we must turn to England.

You are all familiar with the names of the great Elizabethan seamen and soldier-seamen—Drake, Hawkins, Cavendish, Raleigh, Frobisher, John Davis, and others. The expeditions

of Hawkins were of no real geographical importance, nor did Cavendish offer much but a long voyage and great daring to geographical annals, but the other men I have mentioned contributed a great deal.

Drake made the second circumnavigation of the globe. In his storm-tossed operations through the Strait of Magellan he



SIXTEENTH-CENTURY DUTCH MAN-OF-WAR

discovered by accident that there was sea south of Tierra del Fuego, and that the politic stories spread by the Spaniards that the strait could be navigated only from east to west, on account of the current were untrue; and he discovered Drake's Bay, on the northern shore of north-western California. Cavendish, emulating Drake, was the third circumnavigator. Frobisher left his name in the Arctic. John Davis, whose name also is recalled in the Arctic, discovered the Falkland Islands, wrote a famous book on *The Seaman's Secrets*, improved instru-

ments of navigation, and was one of the finest seamen of his day. Their voyages were all performed in the intervals of serving in the Queen's navy against the Spaniard.

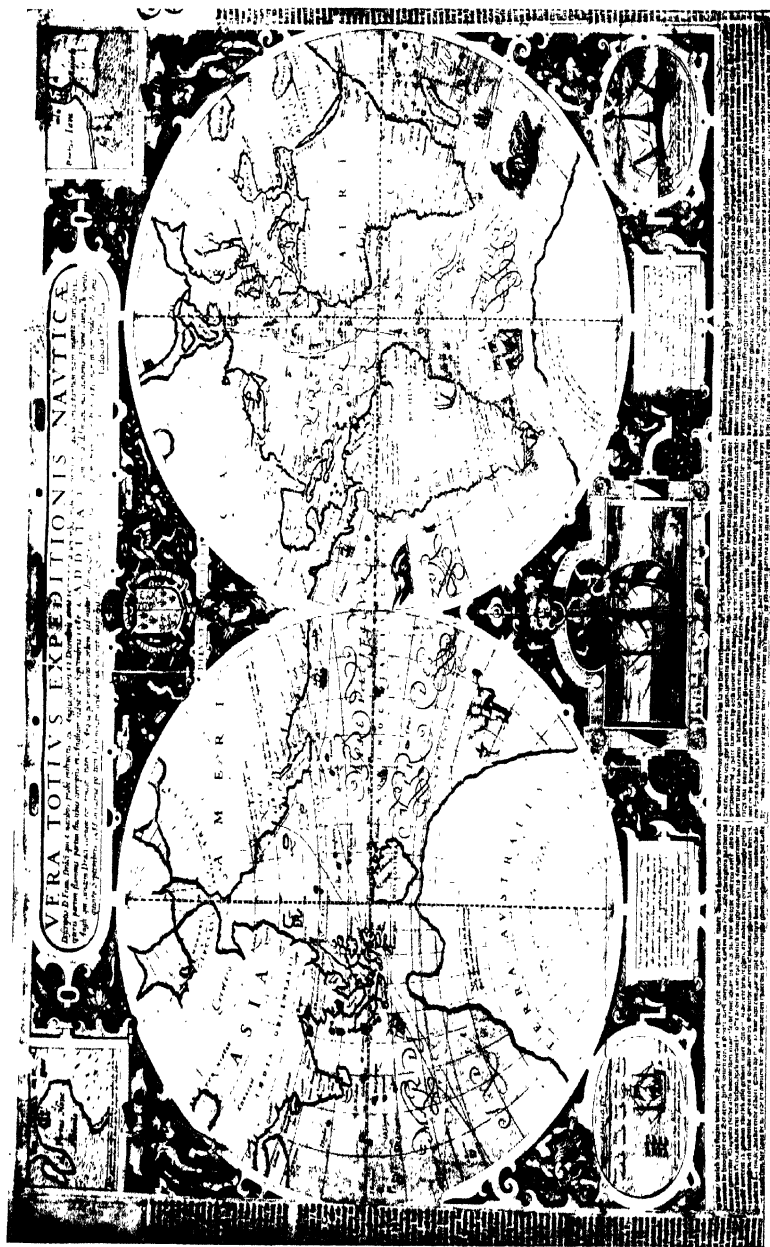
The tussle between England and Spain went on for the whole of the latter half of the sixteenth century and until Queen Elizabeth's death, when King James made agreements with the Spaniard which must have made her turn in her grave. The story of her dealings with Spain from the time when Drake and Hawkins and others launched their half-sanctioned onslaughts upon Spanish shipping until the defeat of the Armada makes curious reading. All these years Elizabeth and Philip skated on thin ice, insulting each other by indirect means, yet neither declaring war outright. The explanation probably lies in the fact that Elizabeth believed Spain to be far more wealthy and more powerful than that country actually was, and she played for time. As a matter of fact, Philip was harassed not only by his war with the Netherlands, but by the fact that his American wealth through mismanagement and extravagance was being whittled away; and he too played for time. Philip's advisers warned him that if he wanted to conquer the northern Netherlands he must conquer England first. But he chose to attempt it the other way round, and failed in both enterprises. Had Elizabeth's privateers, Drake, Hawkins, and their followers, not been so successful in challenging the Spanish monopoly of trade, history might have been very different. But she was continually forced to take action by the proofs brought home by her seamen that it was possible to share the Spanish riches abroad.

Drake made his first really spectacular haul when he fired the town of Nombre de Dios and plundered the mule-train carrying the treasure over the gold road. The treasure was travelling from Acapulco, the west-coast port of Mexico, to the opposite shore. After the foundation of Manila, in the Philippines, the Chinese merchant junks and the spice ships from the Moluccas brought their merchandise there, and the yearly ship, a great galleon, sailed for Mexico laden with all the precious stones, silks, pottery, gold and silver, furniture, embroideries, and spices which had been collected. A great fair was held in Acapulco, where among other merchants were resident Chinese waiting to deal with the merchandise. All the cargo not destined in bulk for Spain was sold, and fetched at least double the price of purchase in Manila. The proceeds of the sale and

the remainder of the cargo were then sent over the gold road and reshipped for Spain. Drake captured a fortune. While he was there he climbed the mountain-range and looked over the top, as Balboa did, into the Pacific, and he prayed God to grant him grace to sail an English ship on that ocean. Even he himself could not have dreamed to what an epoch-making journey that desire would lead him. Five years later he set out upon this voyage.

When he propounded his scheme of fresh adventure to the Queen her usual caution prevented her from fully showing her hand—if she really knew at that time what her hand was. Would it be policy to rouse Spain by letting him go! Already his name terrified the West Indies. The story goes that naughty nursery folk in Mexico were threatened that “El Draque” (the Dragon) would catch them! To appease the Spanish Ambassador in London Elizabeth decided to give out that Drake was going to Alexandria (an easy deceit, for English traders were flocking to the Levant and thereabouts in these days), and with that she gave him his privateering commission, secretly subscribing to his means of sailing.

On December 13 of the year 1577, and with a copy of Pigafetta’s diary in the captain’s cabin, he sailed from Plymouth. He made first for the Cape Verde Islands and took a Portuguese pilot on board. This man was destined to suffer for his service, for Drake landed him at Acapulco, and the Spaniards, who by that time were thoroughly unnerved by Drake’s performances up the coast of South America, seized him and tortured him to make him confess the story of Drake’s past and future plans. From Cape Verde Islands the fleet made for the Rio de la Plata, thence to Port St Julian, where Drake executed Thomas Doughty, who showed signs of rousing the rest of the company to mutiny. Drake did this with genuine reluctance. He was a born leader, and by no means capricious or brutal. He doubtless saved, as he knew he would save, endless trouble by this summary example. Soon afterwards a bout of misfortune set in which necessitated his burning two of his ships. The rest reached the Strait of Magellan, where another ship was wrecked, and a third, after passing through the Strait, deserted; or, at any rate, there was such strong suspicion of desertion that its captain was nearly hanged on his return to England. This left but one ship, the *Pelican*. Drake rechristened her the *Golden Hind*. We do not know the real reason for this action. A golden



MAP OF DRAKE'S VOYAGE ROUND THE WORLD
Drawn by Judocus Hondius, 1595.

hind was the crest of Sir Christopher Hatton, one of the patrons who subscribed to the voyage. Drake may have changed it for luck, or to hoodwink the Spaniards should they have received information from the Spanish Ambassador in London, and to make it more difficult for them to trace his actions. He took possession of an isle he found in the Strait and called it Elizabeth. After passing through the Strait he was storm-tossed so far south that he sighted Cape Horn, and thus realized that there must be another passage.

By this time it was September 1578. He set off up the west coast of South America. His first anchorage was the Isle of Mocha, off the coast of Chile. He now had the prospect of cruising up the west coast of South America with the object of preying upon shipping and coast towns. He had this advantage: the Spaniards had received no information and had no idea of his presence. They were accustomed to have these seas to themselves. Drake was to introduce the era of piracy into them, and his arrival caused the greatest astonishment, to say nothing of consternation. All the wealth of Spain was carried at some period of its progress up or across the Pacific. And the wealth was almost incredible. It was carried in two separate groups of ships. The one group became known as the plate or silver fleet, the other as the Manila galleons. The plate ships came up from Chile with gold and silver, and from the port of Lima with silver (especially from the mines of Potosi, discovered in 1564) to the port of Arica, and sailed thence to Panama, there to be unloaded for the caravan journey across the isthmus. After reshipping in the Gulf of Mexico the cargoes were taken to Havana, to join the treasure-ships from other Gulf ports, and so to Spain. You will understand how easily the West Indies would tempt pirates. The Manila galleon was a king's ship. Its captain was a Spanish nobleman. It was equipped and manned at State expense, grandly decorated, and ceremoniously served. In spite of the fact that scurvy and starvation were often the lot of the crew, there was great competition to serve in her, for the company was allowed to ship a certain amount of private goods for trading, and it was possible to make a great deal of money. This huge vessel carried on her voyages anything up to two or even three million pounds' worth of cargo and specie.

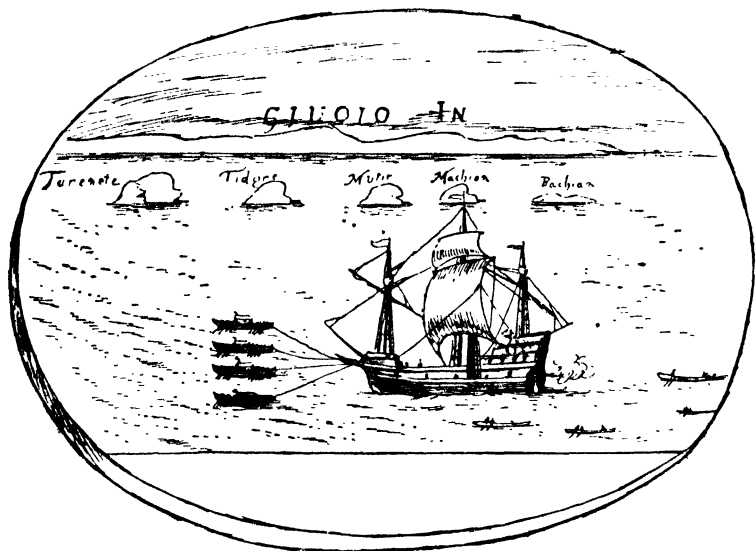
The galleons were big ships, clumsy sailers, and sometimes took as long as six or seven months to wallow across the Pacific.

They were armed, but before Drake had slipped neatly alongside (as he did) and captured one of them, like a lithe young tiger pouncing on an elephant, they sailed peacefully to and fro, endangered only by storm, and the lack of refrigerating apparatus and sufficient provision for distilling water—conditions which, if the ship were delayed, brought her crew to eating their boots and dying literally by the dozen of scurvy. Drake's victim sailed in June from Manila. About the same time, or rather earlier, her sister-ship sailed on the return journey from Acapulco, carrying dispatches for the governor and whatever was needed in Manila. The plate ships were, if anything, richer than the Manila galleons. They were loaded up with ingots of gold and silver collected from the mines up and down the country.

It was an Indian, whom Drake found in a small boat at sea off Mocha Island, who told him that one of the plate ships was then in the port of Santiago (later known as Valparaiso). Drake took her. She thought the *Golden Hind* was a Spanish ship, and saluted her amiably. Drake came alongside, and his armed crew poured into her under the noses of the dismayed Spaniards. There was no bloodshed. (Drake did not kill a single Spaniard on his whole voyage; he was far too clever.) He took full advantage of the fact that he had caught the enemy napping. One Spaniard had the presence of mind to leap overboard, swim ashore, and alarm the town. Only a handful of people were living there, and every one fled precipitately. Drake's crew looted whatever possessions they had, including the church plate, which act the aggressive Protestant element in the crew regarded as no sacrilege. These Roman Catholics were 'idolaters,' and one member of the crew, a man who had been with Hawkins, had been tortured by the Spanish Inquisitors in Mexico City.

This performance was but the forerunner of others like it, though this was the only big ship Drake caught in the south. A number of smaller ones had to disgorge wine and other provisions and small quantities of silver. It was off Callao that he heard of another rich galleon. The truth had not dawned upon the Viceroy of Peru; he thought Drake was a Spaniard turned pirate, and he sent a couple of big ships in chase. Drake fled, and, sailing with great skill, escaped them. The Spaniards, many of them extremely seasick, returned crestfallen to port, where they received a hearty reprimand for their failure.

Off the coast of Ecuador Drake caught the Manila galleon. Much the same thing happened as with the plate ship. Drake had the nerve to draw alongside in his cockle-shell and demand surrender. The puzzled captain had the presence of mind to refuse, upon which Drake's gunners sent three shots into her, one of which neatly brought down the mizzen-mast. There



THE "GOLDEN HIND" AT THE MOLUCCAS

was nothing to do but surrender. Her iron-bound chests were loaded with pieces-of-eight (Mexican dollars), and she carried between twenty and thirty tons of silver ingots besides pearls, plate, jewellery, and almost everything you can imagine. The story goes that the Isle of Plata, off the coast of Ecuador, got its name because Drake there divided the spoils. The empty galleon he sent with its crew on its way to Acapulco.

He now had thoughts of home, and sailed up the coast of California looking for a strait which would carry him into the Atlantic—a north-west passage, in short. He soon gave that up, and put into the bay now called Drake's Bay, careened his ship, called the country New Albion, and took possession of it in the name of Queen Elizabeth, in the hope that England might be able to follow up the gesture by colonization. Nothing came of that, though England, much to the amusement of

Spain, put forward this claim more than once.¹ From here Drake crossed the Pacific. He made friends with the native Mohammedan king of Ternate, in the Moluccas, who resented the Portuguese next door at Tidore, and was prepared to welcome Drake and give England a monopoly of the clove trade if he would avoid Tidore and the Portuguese who were stationed there. Drake gladly gave the necessary assurance, and was able to provision his ship and to take on board as much spice as he could carry. In Java he met the same civility from the native ruler. By now it was February 1580. A rumour reached him of large ships in the offing. He knew they could not be English, so he took himself off and made for the Cape of Good Hope and home. He doubled the Cape in June, the middle of the Cape winter, in fine weather, and was charmed with it. He watered at Sierra Leone, reached the Azores in September, and anchored safely in Plymouth harbour in September 1580, after a voyage of nearly three years.

From the Queen to her humblest subject all England was thrilled, as you know. On board the *Golden Hind* at Deptford Elizabeth knighted her piratical but valiant sea-captain, to crown his profitable, though unlawful, voyage. The Spanish Ambassador was furious. He demanded an interview with the Queen to discuss Drake's "piracies." The Queen had a very good answer to that. Just before Drake arrived foreign troops landed in Ireland. The Ambassador declared they were the Pope's and expressed his Holiness's anxiety for his Roman Catholic flock, but as they were landed from Spanish ships, and were commanded by Spanish officers, the story was much too improbable to deceive even one less astute than Elizabeth. So she refused to see the Ambassador until he could find a more plausible tale, and the now national hero went his glorious way knighted and unquestioned.

The Spanish Crown took the only step which remained.

¹ It was part of her retort in 1791, when she threatened Spain by assembling a fleet in readiness to set out to protect Nootka Sound and neighbouring territory. In 1786 Commander John Meares, R.N., had formed a trading company at Calcutta, and had explored this part, bought a portion of land from the Indians, and arranged with them that his company should have a monopoly of trade. In 1788 two Spanish gunboats, sent for the purpose, captured his trading ships in Nootka Sound and imprisoned his men, for Spain, though she had done nothing to develop the territory, declared she had prior claim to it by virtue of earlier discovery. She relinquished her claim, however, and Commander George Vancouver, R.N., whose name is to be found on the map of America, was sent to take formal possession and to make surveys of the coast.

The Viceroy of Peru received orders to build a fort on the coast of the Strait of Magellan and to close the Strait to foreign ships. Pedro Sarmiento de Gamboa (whom you have met before) was chosen to carry out this work. He had been sent to search for Drake after the *Golden Hind* had slipped away from its pursuers off the port of Lima. It took a few years to arrange the expedition, especially as colonists were to go out and form a permanent settlement with the idea of preventing anybody else, especially the English, from sending out settlers of their own. Several hundred landed there in 1583. The scheme failed completely, as we shall see later on.

While Drake was away Englishmen were abroad elsewhere.

In 1576 Martin Frobisher sought a north-west passage to the Far East, and in 1577 and in 1578 made two voyages to the Arctic. There was not much enthusiasm about his first voyage, but he found a patron in the Earl of Warwick, and sailed with three tiny ships—one of twenty tons, another of twenty-five tons, and a pinnace of ten. The Queen bade him God-speed, and away he went. He reached the bay now known by his name, and found the opening of the strait called later after Hudson. On an island in Frobisher Bay five of his men were spirited away and never seen again. He brought home some black ore¹ which he hoped contained gold. It did not, but hopes ran high. A Company of Cathay was formed, and the next year, with a ship from the Navy in addition to his two little twenty- and twenty-five-tonners, and a subscription from the Queen herself of £1000, he set sail again. He brought home a couple of hundred tons of ore, and a good deal of feeling prevailed over its assaying. It was worthless, but hope died hard. In 1578 Frobisher sailed again, this time with a fleet of fifteen vessels and a hundred colonists. He had no success. He sailed some way into Hudson Strait, and again into Hudson Bay, but one ship was wrecked, the party ill-content, and no settlement (fortunately for them) was made. Frobisher distinguished himself later in the Royal Navy, but the Arctic saw him no more.

The first Englishman to visit India went there in 1579—at least, the first of any importance. (Englishmen undoubtedly sailed there before this time as ordinary members of the crew of foreign ships.) His name was Thomas Stephens. He was

¹ It was iron pyrites, which is shot with gold-coloured particles.

appointed rector of the Jesuits' college at Goa. His letters home to his father were made public, and helped to arouse enthusiasm for direct trade with India. A few years later, in 1583, four English merchants, Ralph Fitch, John Newberry, William Leedes, and James Story, carrying letters from Queen Elizabeth to the "King of China" requesting safe-conduct, made the long journey overland to Ormus, and from there took ship to India. The Portuguese in occupation resented their appearance, and imprisoned them both at Ormus and at Goa. In the end Story set up as a shopkeeper at Goa, Leedes took service under the Great Mogul (Akbar), Newberry made for home and died on the way, and Fitch has come down to fame, for he travelled about in the East and returned home with a valuable account of his experiences.

After Drake's return other adventurers set out to reach China. John Hawkins's brother-in-law, Edward Fenton, sailed, but met with no success. The most notable among them was the ill-fated Sir Humphrey Gilbert. Gilbert's half-brother, Walter Raleigh, enters our story here, and I must tell you about these men in the next chapter.

It might be as well before we go on to explain the word 'privateer,' and the difference between a privateer, a pirate, a buccaneer, and a corsair. You may know already; on the other hand, you may not. People are generally rather vague about it, and as Drake's voyage pitchforks us straight into a natural wonder whether in strict honesty we could have faced the Spanish Ambassador ourselves, you may like to consider it.

A privateer, strictly speaking, was a ship commissioned by the Crown in time of war to attack enemy shipping. A pirate was a sea-robber pure and simple. A buccancer was also a pirate, but the name originally had a special significance. In Hispaniola in the early days there were some French settlers who lived by hunting the wild cattle on the island and smoked the flesh on a grill or frame which in their tongue they called a 'boucan.' South Africans to-day dry beef and buck and ostrich flesh in the sun, and produce much the same thing, which they call 'biltong.' These Hispaniola settlers came to be called boucaniers. They were quite harmless, but the Spaniard resented their presence and set upon them, slew many of them, including women and children, burned their cottages, laid waste their fields, and left them completely ruined. Homeless

and thirsting for revenge, they took to the sea, and attacked and robbed shipping. Eventually the name, corrupted to buccaneer, became applied to any West Indies pirate.

A corsair was a Barbary pirate, with a history of his own much older than the buccaneer's. He was finally wiped out by an American expedition in 1804.

The skull and crossbones, by the way, was not a pirate flag in general, nor was it flown in the palmiest days of piracy. It was a late and degenerate invention. Pirates flew flags of all colours.

Piracy remained a scourge right up to the early part of the nineteenth century. On two occasions kings of England, James II in 1689 and George I in 1717, offered them, with the exception of the most notorious rogues, a free pardon if they would abandon their evil ways, but though the nuisance abated, it did not stop. Men of all degrees went a-pirating. On the island of Madagascar in the seventeenth century a French pirate named Mission founded a model settlement which he called Libertatia—a venture in communism which did not succeed any better than such ventures usually do. In the end the natives wiped them out, and only Mission and forty-five men escaped. Mission lost his life almost immediately, for his ship foundered.

If you want a picture of the pirate from all his diverse angles read Defoe's *Captain Singleton*. The story illustrates, too, the knowledge, or lack of knowledge, of the interior of Africa in Defoe's day.

CHAPTER XXII

QUEEN ELIZABETH'S MEN

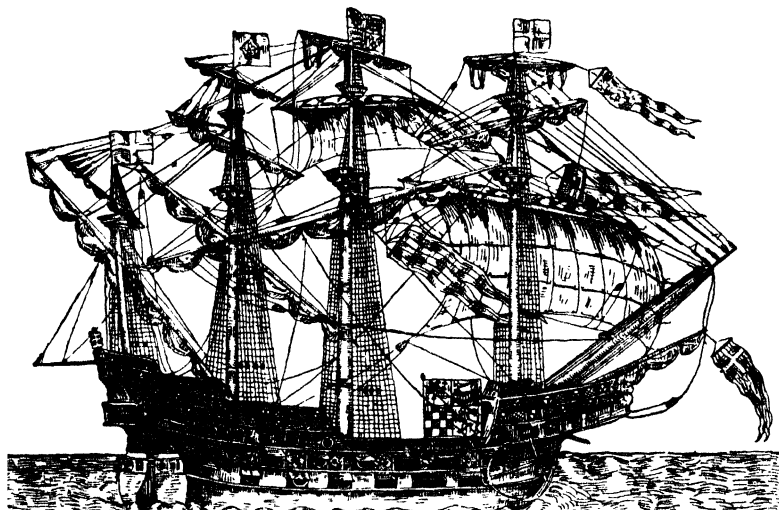
HUMPHREY GILBERT was one of the earliest enthusiasts to project a search for the North-west Passage to Cathay. Early in 1566 he presented a petition to be allowed to command an expedition. In this petition he was joined by Anthony Jenkinson, who afterwards distinguished himself as the Queen's trade commissioner to Russia, to Constantinople, and to the Shah of Persia. The petition was not successful, for Gilbert was sent almost immediately on active service to Ireland.

At the end of the year he was petitioning again, but the Queen required his services as governor of Munster. In January 1570 he was knighted for distinguished service in Ireland. In 1571 he became a Member of Parliament. In 1572 he was off on active service to the Netherlands, where Englishmen were serving in the army of the Prince of Orange, though until the assassination of the Prince the Queen did not make so definite a gesture against Spain as to send a regiment. The next year he was in retirement, pursuing the project so dear to his heart by writing and circulating arguments in its favour. His work probably had a good deal to do with Frobisher's attempt.

At last, in 1578, the Queen granted him a charter whereby he might discover and colonize any lands not already occupied by a Christian prince or people. He sold or mortgaged all he possessed, and all his wife possessed, to find the means for his equipment. The expedition was a complete failure. He fell in with a Spanish squadron, lost one of his vessels, and returned home empty-handed. The next couple of years found him in Ireland again. His patent ran out in 1584; the Queen had placed a limit upon his adventures. In 1582 he determined to try again before the time expired.

His half-brother, Walter Raleigh, who had already visited the West Indies, and whose adventurous spirit was stirred by these experiments, took up the cause. Richard Hakluyt (who in 1589 published his famous collection of voyages) used his pen in support of the new venture; and the Queen was again approached. Wealthy civilians in Southampton helped to

finance the scheme, and Raleigh himself provided and equipped a ship, the *Ark Raleigh*, though he did not go in person. He was sent that year to the Netherlands in the escort of the Duke of Anjou, brother of the King of France. Anjou had been in England soliciting the hand of Elizabeth, and had been invited by the distracted Prince of Orange to take over the titular government of the provinces under his leadership, in the hope



THE "ARK RALEGH"

that the backing of France would finally expel the Spaniard. Nothing came of this in the end.

Gilbert sailed out of Plymouth harbour in June 1583 with, besides the *Ark Raleigh*, the famous *Golden Hind* (forty tons), the *Squirrel* (ten tons), and two other ships. In August he arrived in the Bay of St John, Newfoundland, landed some of his people with the idea of making a settlement, and took possession of the island in the name of the Queen. He then sailed southward to explore, but lost a ship off Cape Breton, and the *Ark Raleigh* deserted. On August 31 he set sail for England, himself in the little *Squirrel*. It went down in a storm, under the eyes of the anguished crew of the *Golden Hind*. So ended England's second attempt to make a settlement in North America.

Raleigh, however, was not dismayed. He procured a renewal

of his half-brother's charter in his own name, and in 1584 sent out an expedition under the command of Captains Arthur Barlow and Philip Amidas. They discovered an island at the mouth of the Roanoke river, off the coast of North Carolina. They took possession of it, and went home to report. Raleigh was jubilant. He christened the mainland Virginia in compliment to his Virgin Queen, and the following year he sent out Sir Richard Grenville with seven ships and 108 settlers. Grenville captured two Spanish ships on the way, landed his settlers on Roanoke Island, and returned to England. Thomas Cavendish sailed with Grenville on this voyage.

In the three following years more colonists were sent out to Roanoke, but all failed. Raleigh himself never went there. He was at court in high favour with the Queen, and occupied in her immediate service.

In 1585 John Davis, friend and fellow-Devonian of Raleigh and Drake, sailed from Dartmouth on his first voyage in search of the North-west Passage. He had been trying for two years to get away, and it was a wonder he did not go with Gilbert. Probably he wished to command his own expedition. Cape Farewell, on the south of Greenland, was his first anchorage, and from there he sailed northward, making for China. He discovered a sound which he called Cumberland Sound after the Earl of Cumberland, possibly one of his patrons and certainly a fellow-officer in the service of the Queen. He thought he had found his passage, but could do no more that year and returned. He sailed again in 1586 and in 1587. On the last voyage he got through the strait named after him and into the entrance of Baffin Bay. He named Cape Walsingham (after Sir Francis Walsingham, one of Elizabeth's statesmen), and also Exeter Sound. He sailed as far north as he could, and then had to return.¹

Feeling was running very high now against the Spaniard, and the crash was bound to come soon. The year Grenville returned from Roanoke the Spanish Ambassador had been expelled. He was discovered implicating himself in the plots surrounding Mary Queen of Scots, who for some years had been under suspicion of intriguing with Spain. As early as 1578 Don

¹ "The new map, with the augmentation of the Indies," to which Shakespeare refers in *Twelfth Night*, was published by Edward Wright, the mathematician, in 1600, and describes John Davis's voyages. Davis was killed in the East Indies by a Japanese pirate when on a trading voyage with Sir Edward Michelbourne in 1605.

John of Austria was for attacking England from the Netherlands, marrying Mary himself, and placing her on the throne. Philip discouraged that particular scheme; he was always jealous of his half-brother. Moreover, Mary's uncles were leaders of the Roman Catholic party in France, and to strengthen France by an English alliance was the last thing he wanted to do. Mary wrote a will making over her claims to Philip, which was far more satisfactory—on paper.

The dismissal of the Ambassador was not the only decisive step Elizabeth took in 1584. After the murder of the Prince of Orange in that year she sent over to the Netherlands a detachment of troops under the Earl of Leicester, and made an alliance with Maurice, the new Prince of Orange. She also sent out a fleet to express her feeling by attacking Spanish shipping. The fleet was commanded by Drake; under him, among others of note, sailed Martin Frobisher, Richard (son of John) Hawkins, and the Queen's own kinsman, Francis Knollys (in command of the soldiers on board). They left Plymouth in September 1585, and did the greatest damage in the Cape Verde Islands, the West Indies, and on the Spanish Main. They gutted whole cities, and burned every ship they could not attach to the fleet. They came home past the coast of Florida, burned St Augustine, and, finding the surviving colonists at Roanoke in riot and despair, brought them home. They arrived in July 1586.

This performance finally exhausted Philip's caution, and he determined to make preparations for an attack upon England. Ships and stores were soon gathering together. By this time he had laid an embargo on English ships—that is to say, he forbade English shipping to enter, or if it was already there to leave, any Spanish ports. Elizabeth replied in kind. It made no difference to the movements of English captains, as you observe. Moreover, the very month Drake returned Thomas Cavendish sailed from Plymouth, bent upon emulating Drake's exploit of 1578-80.

Thomas Cavendish was a gentleman who sought to retrieve his fallen fortunes. He succeeded at the expense of the Spaniards, but only to waste his fortune a second time. He had three vessels and 123 men. He sailed first to Sierra Leone and the Cape Verde Islands, and then across to Brazil, coasting down from Cape Frio. He had a very troublesome time, and was thankful to find anchorage in Port Desire, which he named

after his flagship. He careened his ships there, and sailed on to the Strait of Magellan.

In the Strait he rescued a Spaniard, a survivor of Sarmiento's unfortunate settlement. Sarmiento himself had been taken prisoner by French and English, working in alliance, on his way home to Spain, and his colony had for the most part literally starved to death. The few survivors were scattered, trying to find the way back to civilization. The victims' bodies lay unburied, and it was altogether a grisly business. Cavendish called the place Port Famine, and the name remains to-day. The irrepressible Araucanian Indians attacked him, and some of them were killed. That was another rod in pickle for the next ship, but Cavendish was not to blame this time—he was the victim of predecessors.

On St Mary's Isle he found a Spanish food depot, and the local Indians told him the Araucanians had great stores of gold. Up the Chile coast Cavendish landed his men, and they were met by Spanish cavalymen. The Spaniard whom Cavendish had rescued, and who had undertaken to act as interpreter in the parley that followed, betrayed him. It ended in a fight in which Cavendish was victorious. He then sailed on, and began to take his toll of shipping.

Cavendish was not of the same calibre as Drake, nor had he the advantage of an unprepared enemy. The Spaniards were well on the alert, and messages of warning were passing from port to port. Cavendish caught one such messenger at sea, and did not hesitate to torture him with thumbscrews in order to extract information. It is a grim sidelight on the times that the ship should have been carrying instruments of torture.

He took some score of ships, including, off Cape San Lucas, a Manila galleon, a ship of seven hundred tons called the *Santa Anna*. She did not submit without a fight. The crews of Cavendish's ships mutinied over the distribution of the booty; but Cavendish was generous, and the trouble blew over. He took a Spanish pilot from the galleon, a Portuguese who knew something of Canton, and also a couple of Japanese and three Philippine Islanders who might be useful as interpreters later on. Somewhere off the coast of California the flagship lost touch with the sixty-ton *Content*, and she was never heard of again. Cavendish set the *Santa Anna's* crew on shore in California with provisions and ammunition, and the ship's sails to make tents with. Then he set fire to the galleon. Her fate

was curious. She did not go to the bottom; she drifted ashore, anxiously watched by her marooned company. The hulk beached itself still burning; they rushed down to her, and, aided by the fact that it was raining, extinguished the flames. They then set to, and so far patched up what remained of her that they were actually able to set sail in her and to reach the Mexican settlements. Her commander was Sebastian Vizcaino. He further distinguished himself later on (1602-3) when he commanded an expedition to California, discovered the harbour of Vizcaino Bay, providing a new port of call for the galleons, and took possession of the country for Spain.

Cavendish set out across the Pacific and reached the Ladrones, where the islanders again proved that they deserved the name Magellan had given to their islands, and were the greatest nuisance about the ship. He now had the courage to sail on to the Philippines. The *Santa Anna* Portuguese whom he had on board warned him that the pilot from the Spanish ship had a letter in his pocket surreptitiously given him by Vizcaino, who hoped that the pilot would find means of passing it on to the governor of Manila and thereby encompass Cavendish's capture. Cavendish found the letter and hanged the pilot. He gave out to the natives with whom he came in contact that his ship was Spanish, and they bartered with him amiably enough. On leaving he revealed that he was English, and that the Spaniards were his enemies. Whereupon the natives cheered. They had no love for their masters, naturally enough, and, like all conquered people, thought any devil better than the devil they knew. Cavendish was farsighted enough to treat them fairly, in order to pave the way for future negotiations. He coolly sailed along the coast past Manila, running into a Spanish government boat, which after a few half-hearted shots hurried away from him, and to the captain of which he sent an insolent message by a stray Spaniard he had caught on a balsa, a native raft, to tell him to be sure to collect plenty of gold because the English were coming again with a ship big enough to attack the islands. Though the Spaniards on shore showed every sign of being aware of his nationality, no one ventured to attack him.

The member of the ship's company who afterwards wrote an account of the voyage which Hakluyt published described the Chinese and Japanese merchants who visited the Philippines. He tells us "These men are of marvellous capacity in

devising and making all manner of things, especially in handicrafts and sciences; and every one is so expert, perfect, and skilful in his faculty as few or no Christians are able to go beyond them in that which they take in hand." And again: "They bring great store of gold with them, which they traffic and exchange for silver, and give weight for weight."

Cavendish provisioned his ship at Java and paid handsomely. The native king was very hospitable, and with his people two Portuguese factors visited the ships. They were heartily thankful to see a few Christian souls, and asked eagerly after European affairs. Cavendish told them how their King was a refugee at Elizabeth's court, and how England was at war with Spain, and how he himself had had a right royal time pillaging Spanish shipping—all of which the Portuguese, resentful of Spain's appropriation of their crown, were very pleased to hear. Cavendish sailed from the island leaving behind him a good impression of English character, and stood out to sea for the Cape, which he subsequently rounded in a stiff gale. He watered and reprovisioned at St Helena, met a Flemish ship off Lisbon which gave him news of the conquest of the Spanish Armada, and had a last battle with a storm; and in September 1588 Plymouth saw sailing into harbour a battered little argosy with shining, rainbow-coloured sails (they had been made of silk-grass by South Sea Islanders), and a crew decked out in damask and brocade. The third circumnavigator had reached home.

Everybody was full of excitement about the engagement with the Armada, and the newly returned adventurers heard how the English Navy the month before had scattered the Spanish ships. Up and down the coasts of Ireland and on the islands off the Scottish coast lay wrecks of ships which after the defeat had struggled to reach home by a roundabout way, without pilots and without charts or any exact knowledge of North Atlantic navigation.

In spite of the fact that Drake had made a daring raid on Cadiz the year before, capturing Sagres, the old stronghold of the Navigator, and making it his base, then sailing round to Lisbon to taunt the Spanish admiral into coming out and fighting him—"singeing the King of Spain's beard," he called it—in spite of this, Philip had still regarded English seamen as undisciplined pirates. He had no idea that their ships were far more up to date than his own, and their build, guns, and

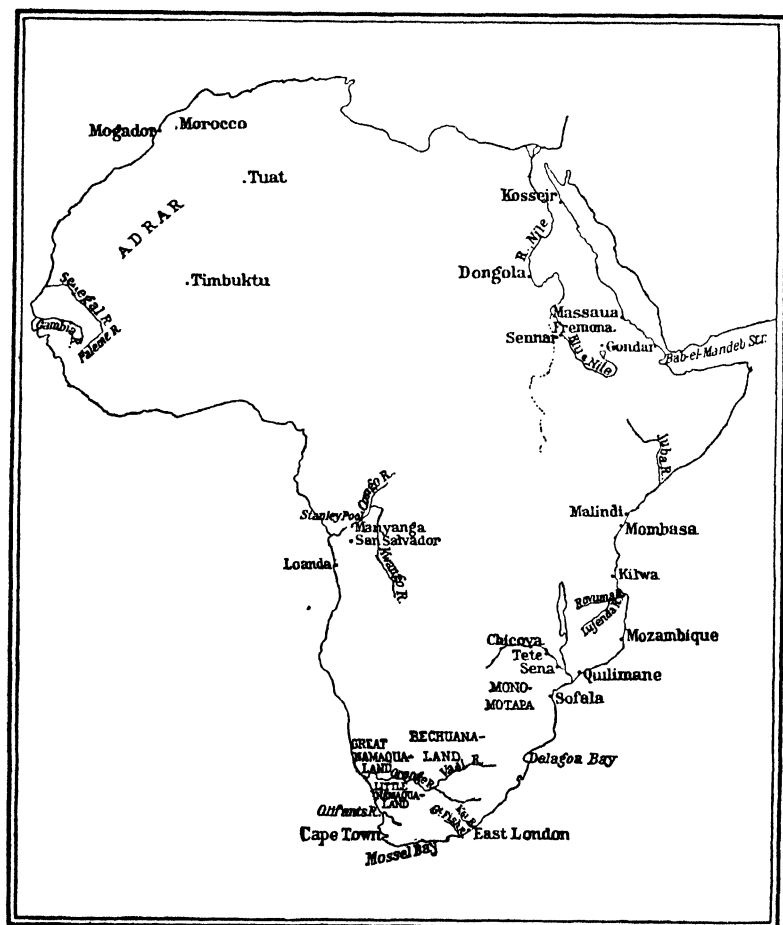
rigging so much better designed for the purpose in hand. Philip's great ships were all very well for the Mediterranean, against Barbary corsairs and the Turk, or upon the West Indian trade route, which was a fair-weather passage; but they were unwieldy hulks when it came to operating them in the more difficult northern waters, and no match for their nimble opponents.

Philip was out of date too with his fighting force. He knew his soldiers were the finest in Europe, and, in the old-fashioned way, he still depended upon them to do the actual fighting at sea. His sailors were rated as little better than servants to the soldiers—a means of getting them to grips with the foe, on the principle that you manœuvred your ship alongside the enemy, grappled his ship, and fought hand to hand. He did not depend upon doing crippling damage with his long-shot beforehand. The English sailors not only knew how to handle their craft like experts, but could handle their guns equally well.

The Dutch fleet did yeoman service in preventing the Prince of Parma from embarking and crossing to England. The victory over the Armada was complete. France and England made an alliance. Philip's star was indeed setting. The following year the Queen made an attempt to recapture for the Portuguese Pretender the crown of Portugal. The affair was mismanaged. One lamentable result of the mismanagement was that Drake was disgraced, and did not regain favour for five years. England continued her campaign against Spanish shipping, hovering over the trade routes to the Indies, and keeping the folks of the Azores in a constant state of alarm.

In 1591 Thomas Cavendish found his natural exuberance had again made havoc of his fortunes, and he decided to go to sea. John Davis sailed with him as chief pilot. Davis had some hope that as he had not been able to find the North-west Passage from the Atlantic side he might discover it from the other. Unfortunately, pilot and commander disagreed, and the voyage is notable only for the fact that they separated (whether by design or otherwise we are not sure), and Davis while storm-tossed off the tail of South America, and in the greatest distress from starvation and sickness, discovered the Falkland Islands (August 1592). Cavendish got to the East Indies, but his whole voyage was a succession of disasters. He died at sea as his ship was heading for home. Davis managed to struggle to Bearhaven, on the coast of Ireland, which he reached in

June 1593. Only sixteen men were left alive out of a complement of between sixty and seventy, and only five were capable



AFRICA

Some of the names appearing in this map did not, of course, come into use until a later period than the Elizabethan age.

From "*A History of Geographical Discovery and Exploration*," by J. N. L. Baker (Harrap)

of handling the ship. They were too exhausted to navigate her into harbour, and had to let her drift ashore. They reached Cornwall later in a fishing-boat.

The year 1591 was remarkable for a voyage of great signifi-

cance, if not of great success. James Lancaster, a man who had had some trading experience in Portugal and must have heard there a good deal about the East, sailed with the first English fleet to round the Cape of Good Hope and to reach India. He was supported by a merchant company of London. Lancaster had no commercial success, unless the capture of several Portuguese merchantmen (now, of course, belonging to Spain) counts as such, but the voyage was to prove a preliminary to one he commanded later with every success imaginable. On this first voyage he sailed with three ships, and lost one of them and all but twenty-five of his complement. His crew mutinied in Ceylon and insisted upon returning.

Lancaster went off raiding in the South Seas after this, as did Drake and Hawkins and Raleigh too (of whom more presently). In 1594 the Queen was glad to accept Drake's advances. She was a little doubtful of agreeing to a proposition of his to attack Panama again. She seems to have had a premonition of evil. If she had it was well founded. While she was considering the proposition the Spaniards made a running attack on the coast of Cornwall and did some damage, though they cleared off when they heard that Drake was coming round from Plymouth. She then ordered Drake and John Hawkins to go out and look for the Spanish fleet, but not to venture to the Indies and not to be away too long.

They took the law into their own hands and attacked Grand Canary. They were beaten and some of their men captured. From these prisoners the Spaniards gathered there was some talk of an attack on Panama and the West Indies. Worse still, Drake and Hawkins quarrelled. Possibly Hawkins wanted to return to England, but Drake was determined to make for the Indies, and he had his way. They attacked Porto Rico and were beaten off. The Spaniards had had time to warn their people to be in readiness. Hawkins was old and ill, and died of fever and fatigue in his ship. A like doom awaited Drake. He tried his old game of capturing Nombre de Dios and the mule train. He managed to burn Nombre de Dios, but all else failed. Sickness attacked him and his men, and off Nombre de Dios in January 1596 he too died in his ship. It seems an ignominious end for one of the greatest seamen of all time, but it was a natural end for such as he in his day.

Evil days had fallen upon that other favourite, Walter Raleigh. The Queen recalled him from his privateering

venture in 1592. He had had the audacity to marry one of her maids-of-honour without permission, and she sent him to cool his ardour in the Tower. She released him very soon, but still withheld her favour, and when the spoils of the Spanish ships which he had taken at sea were divided his share amounted to hardly more than would cover his expenses. Raleigh was hard put to it to repair his fortune. He was desperately poor. He had spent £40,000 on his Roanoke scheme. After Drake brought home the colonists in 1587 Raleigh had made over his charter to a company which did little, and nothing with success. The scheme lapsed. Raleigh's efforts bore fruit nevertheless, for out of this company grew the famous London and Plymouth Companies which sent, early in the next century, when poor Raleigh was under the shadow of the Tower again, the first permanent English settlers to the Atlantic seaboard of North America.

Now, in 1594, he had another idea. No less than to seek that will-o'-the-wisp El Dorado. He would sail to Trinidad and the mouth of the Orinoco, and explore the river. Somewhere he would find a gold-mine. He had been given some practical information about that part of the world by John Hampton, of Plymouth, and other Englishmen who had been on trading expeditions to Trinidad for tobacco, native cloth, and probably slaves. Eight Englishmen had been killed there in a quarrel with the Spaniards. Raleigh knew that the Spaniards were properly established there, and that the territory had a Spanish governor.

He sailed early in 1595, and anchored in Port of Spain, Trinidad, some six weeks later. The Spanish governor did everything he could to dissuade Raleigh from going farther. He warned him that the natives were cannibals, that the delta of the Orinoco was shallow and muddy and dangerous; and, ominously, he sent for more soldiers to reinforce his own garrison. He was determined these foreigners should not trespass upon the Spanish domain. The inevitable happened. Raleigh was nothing loath to avenge his eight slaughtered countrymen, and to interpret the governor's order for more troops as a hostile intention. They fought, Raleigh came off victor, took the governor prisoner, and burned the town. He sent the governor in custody to his ship. He then altered one of his ship's boats to suit the needs of the river, captured an Indian to act as guide, and set off. They were soon lost in the maze



GUIANA, SHOWING THE SITE OF EL DORADO ON THE MYTHICAL LAKE OF MANOA
(IN THE CENTRE OF THE MAP)

This map was drawn by or for Sir Walter Raleigh about 1595. The top is the south; the upper river is the Amazon, and the lower the Orinoco.

From a manuscript in the British Museum

of channels and swamps, and if the guide had not been their only hope of escape Raleigh would have hanged him.

Eventually they got into the main stream of the Orinoco. The natives at first fled from them; they had been told by the Spaniards that the English would devour them. Raleigh insisted upon good treatment, and it served him well, for the Spaniards treated the natives vilely. They got on to the track of gold by finding an Indian in the possession of mining implements, and heard of gold traffic with the Spaniards. Every one kept fit; they had plenty to eat, but little to drink, for the river water was horrible, though there was "good Spanish wine" to be had when they met a native chief. "I never saw a more beautiful country," wrote Raleigh later, ". . . the deer crossing every path, the birds towards evening singing on every tree with a thousand several tunes, . . . and every stone that we stopped to take up promised either gold or silver by his complexion." Some day you must read Raleigh's own account of his adventure. He returned home safely at the end of the same year, burning only the Spanish towns on the coast which would not sell him provisions. He wrote well, and his book, which he illustrated with beautiful maps, was the means of firing not only Englishmen but Frenchmen and Dutchmen with a desire to settle in this paradise. All three did eventually divide Guiana between them, as you know; yet not without dispute.

The Queen still remained adamant even after this effort. It was not until the following year, when Raleigh distinguished himself in another attack upon Cadiz and was wounded, that she took him back into favour. We will complete Raleigh's sad story in this chapter, for he played no further part in the progress of England's ocean trading or colonial settlement.

Elizabeth died in 1603, and James, King of Scotland, inherited the English throne and united the two kingdoms. Sully, the French statesman and friend of Henry of Navarre, called him "the wisest fool in Christendom." As King of Scotland James had had no quarrel with Spain; as King of England he did not propose to embrace his adopted country's quarrel. Philip II had died in 1598, and his son, Philip III, reigned in his stead. James was prepared to make a treaty with Spain, even to marry one of his children to one of Philip's. He had some idea that a Roman Catholic and Protestant marriage would improve European conditions. You may well imagine

that after their stirring experience during the last reign there were men in England with whom the idea was unpopular. James knew Raleigh to be one of these, and accused him of plotting. It was a false accusation, but Raleigh was condemned to death. The sentence was not carried out at once, and Raleigh was committed to the Tower. He employed himself there for years writing a *History of the World*, inventing a new medicine, and hoping for release. He proposed to the King that he should be reprieved on condition that he found a goldmine in Guiana. James lent an ear to the suggestion, and the Spanish Ambassador at once took fright. He warned James that if Raleigh trespassed in his voyage of discovery upon any rights of the King of Spain or performed any piratical actions he should demand full compensation in Raleigh's punishment. In 1616 James let Raleigh go—James needed gold—but he warned him his head should be a forfeit if he offended Spain.

Raleigh sailed the following year. It was hardly possible that he should land again in Guiana without clashing with the Spaniards there. The whole business was a shocking catastrophe. Raleigh declared afterwards that the King betrayed him before he left England. The Spaniards were ready for him, and there was a fight. Raleigh sacked the town of San Thomé, and his own son was killed. He could make no headway, however, and returned to England in June 1618. The Ambassador demanded his head. King James, whose indignation Raleigh was not able to soothe with the promised gold, ordered his execution.

In the Tower just before his execution Raleigh wrote sadly, and slipped into his Bible, the following lines:

Even such is Time, that takes in trust
Our youth, our joys, our all we have,
And pays us but with earth and dust;
Who in the dark and silent grave,
When we have wandered all our ways,
Shuts up the story of our days;
But from this earth, this grave, this dust,
My God will raise me up, I trust.

But Time was less cruel than he thought. He did not live to see Virginia flourish, but it was owing to his inspiration that it came into being, and it is his monument.

CHAPTER XXIII

ENGLAND AND HOLLAND AND THEIR EAST INDIA COMPANIES

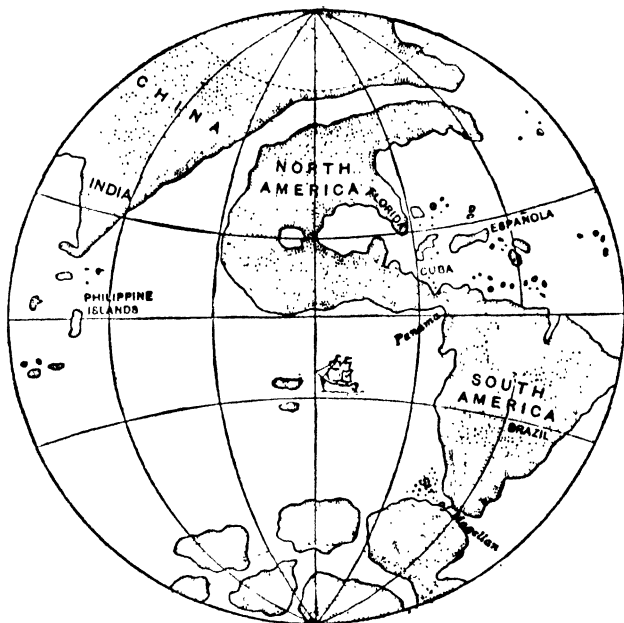
SEPTEMBER 1603 was a landmark in English history, and to King James were brought the honours of a voyage launched under the *ægis* of Elizabeth. In 1600 she had granted a charter to the "Governor and Company of Merchant Adventurers of London trading to the East"; and in that year, under the command of James Lancaster, with John Davis as chief pilot, sailed the first fleet of the East India Company, as it came to be called.

It was eminently successful. In addition to holding the command Lancaster carried letters as Queen's envoy to various Eastern potentates, and both in diplomacy and in commercial transactions he proved himself well worthy of his trust. He established a factory at Bantam, in Java. England's long and distinguished career as a power in the East had begun.

Events will move very speedily now, not only in England but in Holland and in France. In 1603 Samuel Champlain went out to Canada, and his many years' work there were to set the French colony on a lasting basis. Montreal was founded in 1604. In England in 1606, in descent from Raleigh's company, the London and Plymouth Companies were formed, and with them begins the history of permanent English colonization in America. Jamestown, the first English settlement to win through, was founded in 1607. Jamestown was actually near a spot where in 1526 a Spaniard, Lucas Vasquez de Ayllon, had begun to build a fort which he called San Miguel, but he was driven away by the natives. This was in the days when the Spaniards were trying to settle in Florida.

In May 1607 the Muscovy Company made a special effort, and employed Henry Hudson to reach China and Japan *via* the North Pole. He sailed out of the Thames, touched Greenland at an unknown point, and reached the new land, Spitsbergen (discovered by the Dutchman Barents), sailed a little farther north, and was rebuffed by pack-ice. He returned to Tilbury in September. The next year the company sent him out again. This time he passed along the coast of Norway,

rounded the North Cape, and reached Nova Zembla. Ice blocked his way in trying to find a passage between Nova Zembla and Spitsbergen. He then bethought him to get to the mouth of the river Ob, on the other side of the Yalmal Peninsula, already known to Dutch and English. From there he hoped to round the most northern cape of "Tartary" (Siberia),



AN OLD MAP OF THE NEW WORLD SHOWING THE
SUPPOSED PASSAGE INTO THE INDIAN SEAS

and sail across the Pole to China. Needless to say, he came back convinced one could not sail across the Pole; but he made a notable voyage.

In 1609 Hudson undertook a voyage for the Dutch to discover a passage through America to China. After spending a little time off Nova Scotia fishing for cod with the French fishing-fleet he sailed southward and discovered the Hudson river, up which he sailed to about the spot where Albany now stands. Added to the explorations of the Dutchman Adriaan Block some years later, this voyage founded the Dutch claim to settlement on the Hudson, and the colony of New Amsterdam came into being. (Subsequently, when Dutch and English

quarrelled, the terms of peace gave New Amsterdam to England, and it became New York, named after the Duke of York.)

In 1610 a private company of English merchants employed Hudson to seek the North-west Passage. He sailed into Hudson Bay, and explored it to its southernmost limit. But his men were mutinous and turned him adrift in the ship's boat with his young son for company. Nothing more was ever heard of him, nor was the crime punished. His captain, Robert Bylot, who brought the mutineers home, lived to explore again the scene of this disaster. His reports and a map he had drawn led the powers that were to believe that Hudson had really discovered the North-west Passage. A "Company of Merchants of London Discoverers of the North-west Passage" actually came into being in 1612, with the prospect of trading *via* the passage to India; and a Captain Thomas Button was sent out as the first representative of the company, partly to discover, if he could, what had happened to Hudson, and partly to prove that Hudson had found the passage. His voyage did not, of course, reveal the passage, but he discovered the mouth of the Nelson river. In 1614 and in 1615 the company sent out Robert Bylot again in company with others, also without success. In 1615 yet a fourth party sailed, commanded by Bylot and piloted by William Baffin. They got to a strait north of Southampton Isle which they called Frozen Strait, and had to relinquish the search. But Baffin felt confident of ultimate success, and the next year out they went again. They discovered Smith, Jones, and Lancaster Sounds, and named the bay into which Davis had sailed Baffin Bay. If you look at the map you will see how near Smith and Lancaster Sounds brought them to their goal. They were the doorway through which their nineteenth-century successors carried on the search to victory.

England reaped another benefit from Hudson's adventure, for in 1670 King Charles II granted a charter to his cousin Prince Rupert and seventeen others as the "Governor and Company of Adventurers of England trading into Hudson Bay." That was the beginning of the Hudson's Bay Company, the great fur-trading company which exists to-day, and has to its credit a number of important inland journeys of exploration performed by its servants. The original traders started in a small way in a station on James Bay—the extreme south of Hudson Bay—and called their territory Rupert's Land.

As for Holland, the Dutch East India Company was founded only two years later than the English East India Company, and it is time we looked back a little to catch up with Dutch progress.

The war against Spain was still going on under the leadership of Prince Maurice of Orange, but in 1597 the Dutch army won a signal victory in the open field against the Spanish troops, and the end was in sight. Hostilities dragged on till 1609, when a truce of twelve years was signed. The Dutch had won their independence for good, and the "seven provinces of Holland," of which Holland was the leader, had become the Dutch nation.

Before 1597, however, her seamen had sailed in search of empire abroad. When Philip II in 1580 annexed the throne of Portugal he had forbidden the Dutch to trade with Lisbon, and this was an added incentive to the Dutch to seek direct trade with the East, for hitherto they had bought at Lisbon from the Portuguese East India Company, and had built up a fine position for themselves as middlemen in distributing Eastern merchandise. Both English and Dutch had established a regular trade with Russia by sea, and though England had little faith now in the practicability of a north-east passage, Holland still hoped to find one. Her thoughts were turning towards the southern routes to the East too, and the work of one Jan Huygen van Linschoten did much to forward this ambition.

Linschoten was born in the early days of the northern provinces' struggle for freedom. The analysis of his name will interest you if you have ever wondered about the origin of surnames, which, as you know, did not come into general use until the Middle Ages. Jan Huygen is 'John, son of Hugh'; van is 'of'; Linschoten was the name of the village to which he belonged. His mother's name was Maertgen Hendrics van Schoonhaven—Martha, daughter of Henry of Schoonhaven. Linschoten was born for great things. As a boy he read widely and determined to see more of the world. When he grew older his brothers were trading in Portugal, and he joined them there. In 1583 he sailed in a Portuguese trading ship to the Far East, and travelled extensively. He returned to Holland in 1592, and wrote a book describing his adventures, the state of the East, the route there, its commercial openings, and so forth. He relates in his book also how when his ship reached the

Azores every one was terrified because the English were lying in wait, and how they all believed Drake was upon them. It was the Earl of Cumberland and Frobisher and their company that time.

When he arrived home he found his countrymen talking of another voyage to seek the North-east Passage. A merchant in the Russian trade was at the bottom of it. This man got the ear of the States-General (the governing body of the Provinces), and three ships were equipped. Linschoten sailed as supercargo, with the duty of keeping the journal. The gallant Willem Barents, whose name you must already know, commanded. They sailed in 1594. Barents himself passed Cape Nassau, found himself blocked by ice, and returned. The two other ships sailed beyond the Strait of Kara and found the way still open. Linschoten was sure the way to China lay in that direction. So the next year no less than seven ships sailed. They returned unsuccessful, and the interest of the States-General evaporated. Barents was still hopeful, and found the merchants of Amsterdam ready to support him. In May 1596 he set out again.

He discovered Bear Island, and, sailing on, discovered part of Spitsbergen, which he thought must be Greenland. From here he returned to Bear Island, and the ships separated. Barents, with two ships, wintered in Ice Haven, in Nova Zembla. They suffered great hardships, but they managed to celebrate Twelfth Night, and when, at the end of January 1597, the sun glimmered above the horizon again they crawled out of their suffocating hut, and played golf to stretch their limbs. In June they were able to put to sea. Imagine their plight. These boats were open boats, or only half decked, and the floating ice continually threatened to crush such cockle-shells. The company were all more or less ill, and Barents died when they were a week out to sea. The remainder sailed on and fortunately fell in with some Russians at the other end of the island, which cheered them. They also found on shore some scurvy grass, which soothed their ailments. They reached home in November 1597. The commander of the third ship also survived. The remains of Barents's Nova Zembla camp were found there in 1871 by Captain Carlsen. Among Barents's property was a copy of Pedro de Medina's *L'Arte del Navegar*, the most exhaustive treatise on navigation of its time. It was published at Valladolid in 1555, and translated into Dutch in 1580.

In 1597 a fleet reached Holland on its return voyage which brought far more exciting news than did Barents's men. Two years earlier it had sailed for the East under the command of Cornelius Houtman, piloted by John Davis. Linschoten had had much to do with the sailing of this fleet. He had continually urged that an attempt should be made to reach India *via* the Portuguese route, round the Cape of Good Hope. His book was not published in full until 1596, but his knowledge, his advice, and the publication in part of his work helped enormously in sending his countrymen abroad. He drew up the sailing directions for Houtman. He advised that Java was the best place in which to establish Dutch headquarters, for he thought that the Portuguese did not trade directly with the natives there. He was wrong, and the Dutch were destined to face all the force of Portuguese resentment. Houtman's fleet rounded the Cape, touched at Madagascar, reached Sumatra and Java, and, though it had a very bad time and the death roll among the crew was terrible, it had actually made the maiden voyage of a Dutch fleet to the East. Commercially it had achieved little, except that Houtman had managed to arrange a rudimentary trading treaty with the Sultan of Bantam, but it brought the welcome tidings that the conquest of the weakening Portuguese needed only determination. Private merchant companies were speedily formed; ships were built as quickly as possible, and off they went to the East.

In 1598 several fleets attempted the Strait of Magellan and the Pacific passage. One of them set out from Rotterdam commanded by Jacob Mahu, with five ships, and Sebald de Wert with him. The ships were scattered by storm off the Strait. Sebald de Wert came upon the Falklands and christened them the *Sebaldines*, under the impression that he had discovered them, and for some time they were known by that name. Another ship under an English pilot, William Adams, reached Japan, and the Japanese liked him so much he never got away again, dying there in 1621.

The first Dutch circumnavigator was Oliver van Noort. He sailed on Mahu's heels, went by way of the Strait of Magellan, and returned in 1601. His voyage made a great stir at home, but he did not contribute anything to geography. His main ambition was to attack Spanish shipping. The second Dutchman to go round the world was Admiral Joris van Spielbergen, who sailed in 1601 by way of the Cape of Good Hope. He

named Table Bay, "by reason of a high mountain, flat on top, and square like a table." The bay had been named Saldanha Bay in 1503 by Albuquerque's captain, who watered there. This name was transferred to another bay a little farther north, which is so called to the present day.

When in March 1602 the Dutch East India Company was founded its establishment was partly mercantile and, as a



THE EAST INDIES

From "European History," by Hutton Webster (D. C. Heath and Co.)

force in the maintenance of independence from Spain and Portugal, partly political. Its aim was "to erect forts, plant colonies, make war or peace, and arrange treaties for the States-General." It absorbed all smaller merchant companies, and took unto itself a monopoly of trading in the East—a rule which was to apply not only to the Provinces' own nationals, but to everybody else as well. Portugal was to be elbowed out as soon as possible from all her strongholds, and England was to be prevented from establishing herself. When the Company sent out its first governor to Bantam in 1608 he had orders to see "that Holland had entire monopoly of trade with the East Indies, and that no other nation had any share whatever." A first fleet was sent out at once, and the Portuguese were routed at Bantam the same year. Two ships of this fleet met Spielbergen in the East in January 1603, and so emphatic were

the orders about private trading that Spielbergen thought it prudent to sell one of his vessels to the Company and proceed home at once.

This autocratic policy on the part of the Company at first aroused opposition, as one might suppose it would, and there were two men whose opposition led to the discovery of the Strait of Le Maire and Staten Land, and to the doubling of Cape Horn. The Company had specifically stated that it held a monopoly of the passage through Magellan Strait and round the Cape of Good Hope. These two men dared not disobey, but they hoped that by sticking to the letter of the law they could avoid it in spirit. They believed they could find a strait through the tail of South America other than Magellan's. Ever since Drake's voyage suspicion of its presence had grown. These men were William Cornelis Schouten, of Hoorn, a well-known navigator who had already sailed three times to the East as captain, pilot, and (with Spielbergen) as merchant. The other was Isaac Le Maire, a wealthy merchant of Amsterdam. In 1615 they were prepared. Their crews had been engaged for a secret voyage, and the ships got dubbed "the gold-seekers." Isaac Le Maire backed the project financially, and sent his son Jacob in command of the second ship. The mayor and aldermen of Hoorn inspected the crews, and gave them their blessing. They sailed from Texel in June. They went first to Sierra Leone, and crossed from there to Port Desire, in South America. They discovered the new strait which they sought, christened it Le Maire, and named Staten Land (now called Staten Island), which they thought was part of the Antarctic continent. On January 31, 1616, they doubled Cape Horn, which they christened Hoorn (the name has become corrupted) after Schouten's native town, and sailed into the Pacific. They came upon some isles of the Paumotu Archipelago; the first ones were barren, to their disappointment, but later they found refreshment. One of these islands, where a plague of flies descended upon them, they called *Vliegen* (Fly) Isle (now Prince of Wales Island). They further discovered the two northernmost isles of the Friendly group (now Boscawen and Keppel), calling them Cocos and Verraders (Traitors), and Hoorn Isle north of the Fijis, now Horne Island.

They reached the Moluccas, where they discovered *Het Groene Eylant* (Green Isle) and *S. Jans* (St John's) *Eylant*,

found on St John's Day, and Schouten Isle, off the coast of New Guinea. They believed New Guinea was another part of the great Antarctic Continent. The natives welcomed them with missiles from their slings, and a fight ensued in which some of the attackers were killed. Others were more peaceful, but all refused to trade. Eventually the navigators reached Bantam, in Java, only to have their vessels confiscated by the Dutch governor. He would not believe their story of a new strait south of Magellan, and was certain that they had transgressed against the Company's orders. Their crews decided to remain on the island in the Company's service. As for Jacob Le Maire and Schouten, they sailed home with Admiral van Spielbergen, then in port, who was commanding a fleet of the Company's ships which had come to the Indies *via* Magellan Strait, had plundered several Spanish ports in America, and had reached the Moluccas in March 1616. It took Isaac Le Maire several years of litigation to establish his claim and to procure compensation for the loss of his ships. Unfortunately his son, much beloved, died on the way home.

We cannot follow the further adventures of the Dutch and English East India Companies. That story does not belong to this book. It must be sufficient to tell you that the Dutch did fling out the Portuguese with great violence and in a very short time. Though one cannot approve the morality of the performance, one need not feel particularly sorry for the Portuguese. They had done their best to keep every one else out, had had the monopoly of trade there for a century, and did their best to stem the Dutch advance as long as they were able. The Dutch endeavoured to squeeze out the English too, and succeeded pretty well in the East Indies, but in India England held her own. Surat was her first station, and in 1615 she sent out her first ambassador, Sir Thomas Roe, to the Great Mogul, Akbar's son Jahangir. Roe was the example of what every ambassador should be—polished, courageous, honest, and shrewd (though he did in a moment of private exasperation refer to the Great Mogul as "an overgrown elephant"). He procured valuable trading rights for England in India—a business which brought about conflict with the Portuguese, whom the English eventually superseded.

CHAPTER XXIV

AUSTRALIA AND NEW ZEALAND

Do you remember Pedro Fernandez de Quiros, who piloted Mendaña on his last voyage in 1595? That was the year when the first Dutch fleet sailed to the East, and when Raleigh went on his first voyage to the Orinoco. Quiros was one of the finest navigators of his day. The dangers and hardships of his voyage with Mendaña did not daunt him in the least. He determined to command another expedition and to find the great Antarctic continent, which he was convinced was within an ace of discovery.

All the time England and Holland were leading up to the foundation of their great East Indian trading companies, and after they had been founded and when their fleets were going out to the East one after the other, Quiros was trying to persuade the Spanish authorities to let him follow his heart's desire. He had the greatest difficulty. Spain and Portugal were both degenerating; the old enthusiasm was dying. At last he decided upon a wise step. He went to Rome to see the Pope. He succeeded in interesting the intellectuals of Rome, and obtained an interview with the Pope, to whom he unfolded a programme for converting the inhabitants of the Antarctic continent. The Pope recommended the idea to the King of Spain, and the end of it was that Quiros received his commission, the King giving orders to the Viceroy of Peru to supply his needs. Unwillingly and tardily enough the Viceroy equipped him. He sailed from the port of Lima at the end of 1605 with two ships—the flagship (150 tons) and a launch—130 men, and six friars.

I will tell you at once that it was not Quiros who discovered Australia, nor were his the only ships heading for what proved to be Australia. But you will see what happened.

His senior officers were Luiz Vaez de Torres (second in command and captain of the second ship) and Diego de Prado y Tovar. Quiros steered south-east, and if he had continued on this course he would have discovered New Zealand, but he altered it. He says himself that he could no longer battle with the winds in that direction. His ships were all very well

for coasting, but left much to be desired in an ocean which was anything but pacific. He decided to make for Santa Cruz Island and to steer south again from there. He was ill and felt unequal to the continued struggle, and his men were dissatisfied. He cheered them by promising them gold and silver and caps full of pearls, and they got as far as an island, probably Chain Island, in the Paumotu Archipelago, about two hundred miles east of Tahiti. He sailed along the whole length of the archipelago, and, steering for Santa Cruz, came upon many islands and eventually upon Taumaka, the largest island of the Duff group,¹ where a native chief gave him to understand that to the south there were more islands and continental land. Quiros gave up Santa Cruz and steered south, discovering the Banks group and Aurora and other isles of the group to which Cook gave the name of New Hebrides. The New Hebrides extended so far and were so close together that he thought he really had found the long-desired continent at last. He landed and took possession "of all this region of the south as far as the Pole, which from this time shall be called La Australia del Espiritu Santo for all its dependencies for ever, so long as right exists." According to (I think) Quiros himself, the word Australia had not in the first place anything to do with the island's being in the south, but was in compliment to the pretensions of Philip III through his mother to the crown of Austria. The island upon which Quiros landed is still called Espiritu Santo—a tiny monument to the discoverer's dreams. Alas, that it could be nothing more, even upon the little island itself! Quiros was a sick man; his crew by now definitely mutinous. He had visions of building a city of white marble which he would call New Jerusalem, and he would send to the King for three thousand friars to come out and convert the islanders. He was angry that his men had killed some of them who, Prado declares, attacked first. Prado was out of all patience with his commander's highfalutin notions. If men stood a good chance of getting a poisoned arrow into them any minute, the only thing to do was to cow the natives before more valuable lives were lost. But Quiros, says Prado, "could not swallow it, being a Portuguese." It is possible there was something of the same feeling on this voyage as among the Portuguese and Spaniards with Magellan. Quiros even held

¹ This group lies east of Santa Cruz Island, and was rediscovered by Captain Wilson, of the ship *Duff*, at the end of the eighteenth century.

a service in which he decked his men in ceremonial robes which were to signify that they undertook to protect the natives. "All wind!" scoffed Prado. What has become of those caps full of pearls? All we have found are "black devils with poisoned arrows."

The crew was of Prado's opinion. To make matters worse, one ship's crew ate some poisonous fish, in spite of the fact that an old sailor had warned them not to; and as they writhed in agony on the upper deck, vowing they were dying and howling for the father confessor, Quiros decided to leave the spot and try his luck farther on. Things had grown so hot in the flagship that Prado asked to transfer into Torres' ship. He felt that a mutiny was imminent and that the crew wanted him for commander, and he had no desire to jeopardize his service record by being involved in a mutiny. We can imagine that Quiros was only too glad to let him go; at any rate, he went.

The ships sailed in June 1606. Then a curious thing happened. A storm arose, and they decided to put back; Torres got in, but there was no sign of the commander. One of two things could have happened: either he had been unable to make harbour again in face of the wind and had been wrecked, or his mutinous crew had clapped him under hatches (and Prado was pretty certain that was so) and made for home. Torres and Prado waited and then looked about for signs of wreckage. None appeared. What the actual truth of the matter was we shall never know. Quiros made Acapulco, in Mexico, and was coldly received by the officials. He found his way to Madrid in October 1607 and gave his last two coins to a beggar. He sold his clothes and his bedding to find money to print a memorial of his voyage. He says there was not a mutiny. Prado says that in Mexico he heard there was. In any case, it was a sad business. There is no doubt that Quiros had genuine religious aspirations; he meant to deal honestly by the Pope, and for once such aspirations outdid the greed for gold. In a hard and greedy age he saw visions and dreamed dreams, but he lacked qualities of leadership, and it became "all wind," as Prado said. Nobody would trust him now. He sent petition after petition to the King, who at last granted him five hundred ducats. Quiros wanted to go to sea again, but the Government pilots darkly hinted that that would be unwise. He was so persecuted by slander that it was even suggested he might sell his knowledge to the English; he had better be kept

at Madrid at his chart-making. He did eventually extract a promise from the King that instructions should be forwarded to the Viceroy of Peru to fit out another expedition for him, but secretly the Viceroy was told to procrastinate and put him off. Quiros set out for Peru, but he died in Panama on the way out—a circumstance that we cannot but regard as fortunate when we realize that the disappointment of all his hopes was before him.

When Torres and Prado decided that their commander had really left them they opened sealed orders which had been given them to meet the emergency of a leaderless state. They found that Prado, not Torres, was to take command, and that Prado was to make charts of all he found. They set sail, going south towards New Caledonia; then they turned north and made the eastern end of New Guinea. They discovered several islands there, and sailed along the whole south coast of New Guinea itself, which carried them through the strait now known by Torres' name. It was the strait which had already found its way into the Dutch maps—how we do not know. We have no historical record of its having been discovered earlier. The navigators must have sighted the extreme point of the York Peninsula of Australia, but they thought it was another "very great" island. They landed on Basilisk Isle, so named in 1873 by the English Captain Moeresby after his ship. After passing the western end of New Guinea they threaded their way through the Moluccas and reached Manila, in the Philippines. From Manila Torres wrote a letter home describing their discovery. It was not published; it simply lay in the archives of the Government, who, in accordance with its usual policy of concealing the information its navigators brought home, said nothing to the world about it. Fortunately Torres left a copy of the letter with the officials in Manila, probably in case he was wrecked and lost on the way home. In 1762 the English took Manila, and Alexander Dalrymple, hydrographer to the Government and to the East India Company, came across the copy of Torres' letter. You can imagine the interest it aroused. Dalrymple suggested the strait should be christened after Torres, and Torres Strait it became. We think Torres must have died on the way home, because we next hear of Prado sending back his own maps from Goa, in India.

One of Quiros's petitions found its way into Dutch, English and French, which could have pleased Spain little, though it

was too late in the day for it to have mattered much whether she suppressed her adventures in the South Seas or not. The torch had passed on, and the Dutch were established at Bantam. Thereby hangs the rest of the tale.

In the very year (even a few months earlier) in which Torres and Prado passed the extreme northern point of Australia a little Dutch yacht, the *Duyphen* (*Dove*), sailed from Bantam "to explore the islands of New Guinea." In March 1606 she brought back an account of having visited what we believe must have been a point somewhere upon the Ninety-mile Beach, on the west coast of Australia. The most savage of savages (William Dampier later remarked of them that Hottentots were gentlemen compared to them) murdered some of the crew. They could discover nothing about the place. There were no provisions, and water was most difficult to come by; generally they had to dig for it. They coasted as far as a cape which they called Keerweer (*Turnagain*). It was a vague story, and nothing else is recorded for about ten years. Then we find that various ships outward bound from Holland to Bantam have instructions to seek the great south land on the way. Among these ships was the *Eendragt* (*Concord*), commanded by Dirk Hartog, of Amsterdam. He discovered Dirk Hartog's Roads, and on an island in the roads he fixed up a tin plate on a post with his visit and the names of his companions inscribed upon it. The date was October 25, 1616.

Several ships visited the west coast between then and 1622. In 1623 the governor sent the yachts *Pera* and *Arnhem* from Amboyna, commanded by Jan Carstens, to follow up Hartog's work. Carstens and several of the crew were murdered in New Guinea, but the yachts went on. They became separated, and the *Arnhem* returned home; but the *Pera* continued her explorations, and, cruising along the north coast of Australia, discovered the Gulf of Carpentaria and named Arnhem Land. She found it barren enough, and the natives of the lowest order. She returned home and reported that neither land nor people was of much use to the Dutch East India Company. This was not very encouraging, and it was some time (1636) before a vessel was spared from the East Indian station to go exploring. In 1627, however, an outward-bound vessel from Holland, the *Gulde Zeeopard* (*Golden Sea-horse*), paid the first visit to the south coast; and accidentally a homeward-bound ship, the *Vianen*, happened upon the west coast again, and named the spot De

Witt's Land, possibly after the commander (we do not know who he was). In 1629 one of Captain Francis Pelsart's ships was wrecked on the Houtman Abrolhos rocks. (Abrolhos is Portuguese, and means 'look-out.') He was obliged to leave most of his men and set out for Batavia for help. When he returned he found a mutiny in progress; so he executed a ring-leader or two, marooned a couple of others, and returned home with the rest.

None of these adventures was very encouraging for the Company, but the impression remained that somewhere gold-bearing islands lay undiscovered, nor was the wish altogether father to the thought. In the past a ship had returned from some vague region in the south, bearing treasure which it had actually taken from a wreck found upon these dim coasts, and the idea that some of the treasure was a local product had not been expunged from men's minds.

Travelling backward and forward to the East Indies in the thirties of the seventeenth century was a Dutch navigator whose name you all know—Abel Janszen Tasman. The Dutch Governor-General on the East Indies station at that time was Anthony van Diemen. He was obsessed with the idea that gold-bearing islands were to be found; he had visions of extending the Dutch colonial empire, and, determined to search first the North Pacific, he chose Tasman for this task. Nothing came of the voyage except that Tasman brought home more complete knowledge of the coast of Japan. Then in 1642 van Diemen sent him out from Batavia bound for the south land. He made what seems to us now an enormous *détour* and anchored first off the island of Mauritius, known to him as Prince Maurice Island. A Portuguese, Mascarenhas, had discovered it in 1505, and the Dutch took possession of it in 1598, their East Indiamen using it as a port of call. From Mauritius Tasman sailed south-east and discovered Tasmania, which he called Van Diemen's Land after the governor. He landed, but saw no people, only footsteps cut in the trees for climbing; and he hoisted a flag.

From this point Tasman next sailed north-east and sighted the south island of New Zealand, which he thought must be Schouten's Staten Land or part of it. Continuing northward, he anchored in what we now know as Cook Strait. Tasman called the little bay in which he found himself Murderer's Bay (later Massacre Bay and now Golden Bay). He

did not sail on, and so did not discover that he was in a strait. You can guess why he named his anchorage as he did: he had trouble there. He did not land at any point in New Zealand—the natives were too threatening. He sent an unarmed boat's crew to warn his second ship to be on its guard. Natives in a canoe approached them; whether his men took fright unnecessarily or whether the natives showed themselves bent on mischief we do not know, but Tasman's men attacked with their oars, three of them were killed, and the rest had to swim for their lives.

Tasman sailed up the west coast of North Island, rounded North Cape, and, continuing north-east, discovered the Pylstaart Isles. After this he found and named Rotterdam, Middelburg, and Amsterdam, islands of the group which Cook in later days called the Friendly Islands. Steering to westward and for home, Tasman next reached Fijis, which he called Prince William's Islands. North of the Solomon Isles he found the Tasman Isles, and, passing along the north coast of New Guinea, he sailed through the Moluccas and into the Banda Sea. He reached Batavia again in June 1643.

Next year he was sent out again, further to explore the south land, and to discover whether New Guinea and Tasmania were islands or whether they were part of the mainland of Australia. He proved neither, but he himself called his voyage "the happy voyage," as indeed he might. He charted the coast of the Gulf of Carpentaria, and named it after Carpentier, the president of the East India Company, and also the eastern coast of Australia to 22 degrees south (about midway). The authorities were not impressed by this effort. It was not sufficiently spectacular, but it was a useful work. Australia did not receive another visit of note until the end of the century, and New Zealand languished for a hundred and twenty-seven years before another navigator visited her—the great Captain Cook.

The coast of Australia gave no promise of great things, and the Dutch East India Company was deeply engaged in other affairs. In 1652 the States-General decided to make the Cape of Good Hope a properly guarded and provisioned half-way house for their fleets. They sent out Johann van Riebeeck as governor. They had no original intention of developing South Africa as a colony, but in spite of themselves the settlement grew, urged forward in the first place by a later governor, who

was able to recognize the possibilities of the country as a colonial possession.

It was an Englishman who visited Australia towards the end of the century—William Dampier. By rights Dampier should have been hanged. The seventeenth century was the heyday of the pirate. In those days it was possible to be a pirate and a gentleman, and even a pirate and a scholar; and into this class of super-pirate came Dampier. It was as well he was not hanged: we should have been the poorer. He was a fine navigator and a keen observer, and could draw and write entertainingly. On the voyage which landed him in Australia in January 1688 he, in company with a number of other notorious characters, had had a wonderful time pirating up and down the coasts of South America and Mexico. He had fought in the 'battle of Perico,' a battle between pirates and Spaniards the description of which reads as though it came from a boy's book of fiction; and when the various captains of the pirate fleet had separated Dampier, in the course of further piratical adventures, had joined up in Virginia with another captain bent on Spanish plunder. They went to Guinea, and from there to Cape Horn; they raided Spanish ports on the west coast of America, and then headed for the East Indies. Their provisions gave out when they were crossing the Pacific, and they reached the Ladrões just as the crew had decided to eat their officers, beginning with the captain. In the Philippines, after six months of outrageous behaviour, Dampier decided things were getting too hot altogether, and to bring them to a crisis he quarrelled with his captain. (Dampier quarrelled with people whatever happened.) Now he and a number of others took the ship and left the captain and his adherents in the Philippines. He sailed to Cochin China and Formosa and then to the Moluccas, and afterwards, heading for the Cape of Good Hope, he fell in with the coast of New Holland, as the Dutch had named Western Australia, somewhere along the Ninety-mile Beach. He thought it a horrible spot—barren, hardly any water (and what there was had to be dug for), and with the most ill-favoured natives he had ever encountered. In May 1688 he arrived at the Nicobar Isles, and as by that time his crew had had enough of him they marooned him. Dampier says they did not maroon him; he wished to stay there and trade in ambergris. Perhaps that was it. Several other men were marooned, or elected also to trade in amber-

gris—two Englishmen, a Portuguese, and some Malays. They managed later to get to Sumatra in a canoe. Several of them died, and Dampier very nearly did. His next misfortune as he was travelling about was to be taken by a press-gang, to serve as a gunner in the English fort at Benkulen. He did not get back to England until 1691. He had made no particular contribution to geography, but in the course of his considerable adventures he had been round the world, and the publication of his delightful journal brought him much fame, and led to his becoming a perfectly respectable person in command of their Majesties King William and Queen Mary's good ship *Roebuck*. But this was not for another seven years.



STATUES ON EASTER ISLAND

Meantime we must take the opportunity to record that another pirate captain, Edward Davis, one of Dampier's old companions in iniquity and also wandering about the Pacific, landed upon Easter Island, which had been sighted by Mendaña on his first voyage. Davis hurried away: it was an eerie place. Great ruined monuments stood there of some bygone religious cult—a relic of some Polynesian people who once perhaps knew their way among the Pacific islands, and paddled their boats from Malay and on to New Zealand. Davis reported his island, and it was known as Davis Island until Roggevein, a Dutch explorer, looking for 'Davis Land,' saw it again on Easter Sunday in 1722, and rechristened it.

Two years before Dampier took up his command of the *Roebuck* another Dutchman, Willem van Vlaming, visited Australia on his way to Batavia with an East India Company fleet. He had instructions to seek some other ships that were missing, and to explore what he could of the great south land before

sailing on to Batavia. He anchored in Hartog's Roads, and found Hartog's plate. So he took it down and put up another in its place with his own record added to the earlier explorer's. (This plate was found in 1801.)

Vlaming then coasted south and discovered the mouth of a river. He sailed into it, and found black swans on it, two of which he managed to carry home alive. He christened the river Swan, and that name it bears to-day; the city of Perth stands upon its banks.

In January 1699 Dampier, by favour of no less than the Lord High Admiral of England, came into his command. England was at peace at this time, and King William seized the opportunity of leisure to further exploration. Dampier sailed by way of the Cape of Good Hope, and headed for the west coast of New Holland. He anchored in Hartog's Roads, and discovered Shark's Bay, named, of course, from the unpleasing creatures which infested it. Drinking-water was the great difficulty; it always had been the difficulty on this coast, and the men were obliged to dig for it. They sailed away in a few days, and presently discovered Dampier Archipelago, and named one of the isles Rosemary. They landed on the mainland to dig for water again, and natives appeared. Dampier wanted to discover from them where they got their water, but they misinterpreted the movements of his men, and the result was a dead native and a wounded sailor. The natives attacked first, and Dampier shot over their heads to frighten them, and only when his man was in real danger did he kill his assailant. Still short of water, Dampier cruised about, writing delightful descriptions in his journal of all he saw, but exasperating his men, who saw nothing in this adventure, and whom Dampier was not clever enough to manage. To make matters worse, scurvy broke out among them. They cruised about for over a month, encountered natives again, and covered nine hundred miles of coast, but made no discovery which added anything of geographical importance to Dampier's record. He recruited and cleaned ship at Timor, in the East Indies, and from there went on to New Guinea, and, meeting off the north-east coast with an island which he called New Britain, surveyed three sides of it. His ship was in a very bad state, and his men peevish in the extreme; he decided it was time to make for home. He went round by the Cape, got his groaning ship as far as Ascension Island, in the Atlantic, where

it sank under him. He and all the crew managed to save themselves in the boats, and they sailed home with an East Indian fleet which happily passed by and took them off.

The rest of Dampier's story has nothing to do with geography nor with this book, but I may tell you that it is entangled in the story of Robinson Crusoe, and with that bait to lure you to find out for yourselves what happened in the end I must leave it. As you all know, England eventually colonized Australia and New Zealand. They did so by the right of the discoveries and survey of Captain Cook, who set out in the next century once and for all to solve, among matters of scientific interest, the problem of the great Antarctic continent. He did not find it, but he wrote :

If I have failed in discovering a continent, it is because it does not exist in a navigable sea, and not for want of looking after : insurmountable difficulties were the bounds to my researches to the south. Whoever has resolution and perseverance to find one beyond where I have been [his landfall farthest south was South Georgia] I shall not envy him the honour of the discovery ; but I will make bold to say that the world will not be benefited by it.

Later generations were to prove Cook wrong in his estimation, but that does not detract from his splendid service to his own. His three great voyages of exploration added vast tracts of hitherto unknown lands and seas to the maps of the geographers. He circumnavigated and charted New Zealand, and surveyed the east coast of the Australian continent, besides discovering several groups of islands in the Pacific and the Southern Ocean.

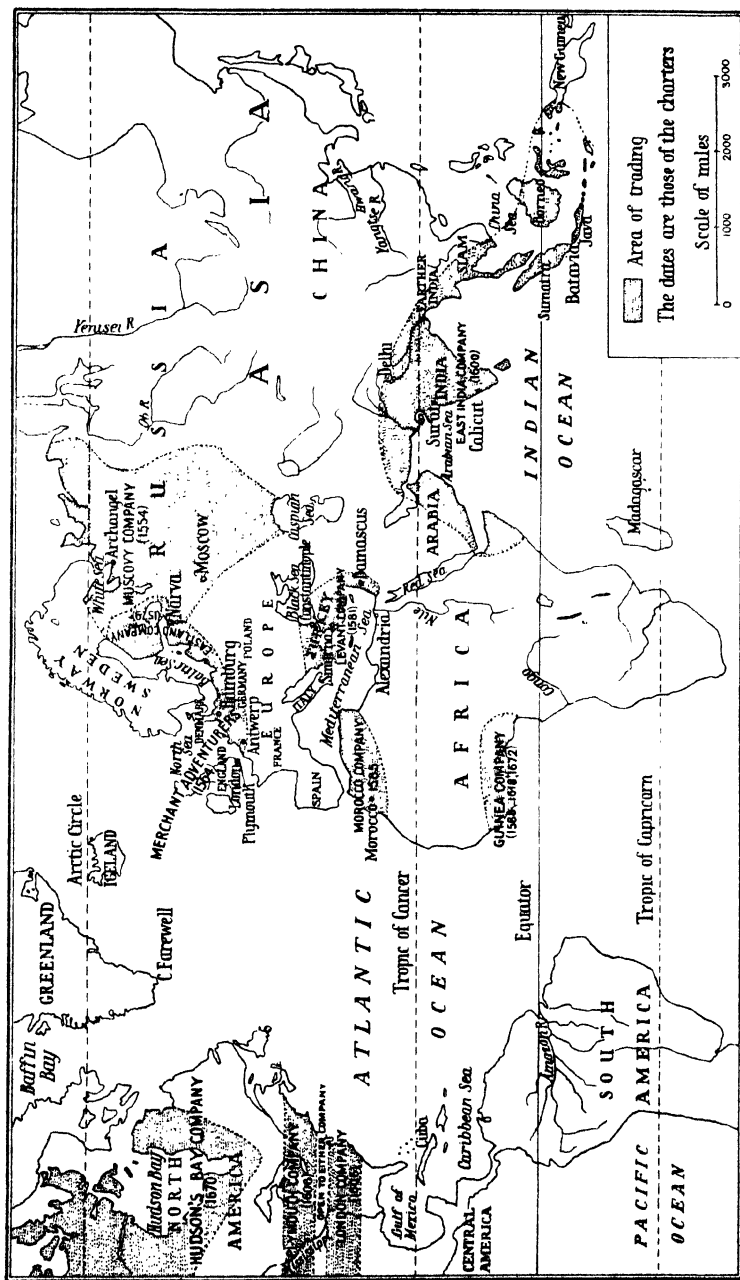
CHAPTER XXV

THE SEVENTEENTH CENTURY

THE seventeenth century was the period of the discovery of the last great land-masses (other than Arctic and Antarctic regions), and with the end of this century I bid you good-bye, save for the trimming up of a few loose threads.

The century was a bridge to the period of modern exploration, a time not only of achievement but of preparation for a new era. We must examine now what else was happening within this century besides the events described in the previous chapter.

The end of the century left much to be done. Inland exploration of the newly discovered lands is not within the province of this book, but you must be reminded that inland discovery was in itself a new saga, and the exploration and settlement of the great land-masses brought within the grasp of Europe during the last two centuries was nearly all before her. The Spaniards had already ranged in a marvellous way over South America and Mexico, but they had developed nothing of what is now the United States, though they entered the country so early. Portugal was in Brazil, and the French, Dutch, and English were finding footholds in Guiana. France had explored from south-eastern Canada (New France), along the Mississippi, and had driven a wedge of territory down to the Gulf of Mexico, which she had called Louisiana in compliment to her King. On the Atlantic seaboard of what is now part of the United States English and Dutch were colonizing, and William Penn, the Quaker ('Friend' is the proper term) and son of Admiral Penn, had founded his City of Brotherly Love—Philadelphia—in Pennsylvania. Families of Germans and Swedes had settled near by. Australia and New Zealand were but coast-lines, and not complete at that. A Dutch settlement was in the toe of Africa; and it was augmented and improved by parties of French Huguenots who were given permission to leave France on the revocation of the Edict of Nantes in 1685. (The Edict of Nantes was a wise measure passed in 1598 by Henry IV of France. He had been brought up a Protestant, and became a Roman Catholic for reasons of State



ENGLISH TRADING COMPANIES

after his accession. The Edict gave the French Protestants liberty of worship within certain limits, and admitted them to government and university appointments. Louis XIV revoked it, to the detriment of his own country and to the benefit of many others, for the Huguenots were drawn largely from a well-conducted, hard-working craftsman and farming community.)

English and Dutch companies were trading to Guinea. The Dutch West African Company had ousted its early rivals, but in 1672 Charles II granted a charter to a powerful English company destined to trade on the Guinea coast, and to trespass, so decided the Dutch, upon their preserves. Trade jealousy, alas, was at the bottom of the war between England and Holland which broke out in 1652, to be patched up, only to break out again. In 1651 Cromwell made England's first essay in what is called Protection, and passed his Navigation Act which forbade foreign ships to carry English or English-American goods. The Dutch had always been great middlemen, and this aroused their fiercest resentment. England aggravated her offence by so far pandering to her own naval pride as 'mistress of the seas' as to insist upon a salute from every foreign ship as it passed her vessels in the Channel. When the redoubtable Van Tromp met the English fleet, under Admiral Robert Blake, off Dover the English commander ordered Admiral van Tromp to dip his flag. The Dutchman, as might have been expected, replied with a broadside.

The dispute was reflected in the Dutch and English colonies on the Atlantic seaboard, and the Dutch colony of New Amsterdam ended by coming under the British Crown. The Dutch had founded a Dutch West India Company in 1621, and had sent colonists out. In 1626 the Dutch governor, Peter Minuit, bought Manhattan from the Indians for merchandise to the value of sixty guilders (five pounds). Cromwell sent out a fleet in 1652, when war broke out between the two countries, to annex the Dutch colony by right of prior discovery, for Captain John Smith, who went to Virginia with the first settlers, had charted, long before the Dutch colonists' arrival, the whole coast of Norumbega, as it was then called, renaming it New England. Peace was declared and the matter lay in abeyance, but in 1674, after a third war, the territory of Dutch occupation was ceded by the Treaty of Westminster to England.

Again, with Charles II's Portuguese bride, Catharine of

Braganza, came Bombay and valuable trading rights in the East as part of her dowry. The weakening Portuguese were vigorously attacked in the East by the Dutch, who contested the settlements there with England. This gift further aroused trade jealousy. There were other reasons which complicated the relations between Holland and England, though trade was always the prime cause. The French King, Louis XIV, in 1665 had attacked the Spanish Netherlands (Belgium). He explained his action on the grounds that the dowry of his wife, who was daughter of the King of Spain, had not been paid. The dowry should have cancelled any claims she might have had as a Spanish princess to Spanish possessions. England was afraid that Holland and France would make an alliance with a view to dividing Spain's colonial riches and trading rights, for France showed hostility to England by digging up some old agreement with Holland, and in 1666 aided the Dutch in attacking England. The next year, as London lay stricken under the double disaster of the Plague and the Great Fire, the Dutch sailed up the Medway and wrought the greatest humiliation. So in January 1668 England contrived to win the Dutch Republic to a treaty whereby they agreed together to persuade, or to force if necessary, France and Spain to declare peace. Peace was declared. The English Protestants were pleased because the treaty drew together two great Protestant Powers, England and Holland, against the two great Roman Catholic Powers, Spain and France, and the people in general were pleased because their fear of France was abated. But this by no means settled matters.

King Charles personally had French sympathies. King Louis was his cousin, and his beloved sister was wife of Louis's brother; and he had lived in France after the execution of his father, Charles I. He was strongly tempted to try to effect a compromise between his relations with France and his treaty with Holland. Moreover, treaty or no treaty, Dutch merchantmen abroad continually assaulted English merchantmen. Charles was also out of patience with his Parliament, because it seemed that whenever he summoned it to vote supplies it could do nothing but wrangle over his attitude of tolerance towards Nonconformists and Roman Catholics. All his reign he was harassed by lack of money and the disunity of the kingdom caused by the intolerance of the Anglican Church for any creed but its own. His Roman Catholic subjects were the

most loyal Charles had; he himself, if anything, preferred Roman Catholics, and in trying to gain sufferance for the Protestant Nonconformists he hoped to take the first step in gaining an equal tolerance for Roman Catholics. Various motives drove him at last to making a secret treaty with his cousin, Louis XIV. This was the Treaty of Dover, and he



Louis XIII Roy de France

LOUIS XIV

signed it in 1670. The agreement was that Charles should declare himself Roman Catholic, recognize France's claim to the Spanish Netherlands, and join France if she fought Holland, as she fully intended to do. In return England was to receive as spoils of war a share of the Spanish colonies, the port of Ostend, in Belgium, and the Zealand Islands. If Charles had any qualms of conscience about his treaty with Holland they were allayed by the fact that Louis revealed to him that Holland had approached France with the suggestion of a Franco-Dutch agreement and a partition of the Spanish colonies, and also

by the fact that the Dutch showed every determination to continue blocking English merchant enterprise wherever they could.

The year the Treaty of Dover was signed the Prince of Orange, nephew of Charles, came to England. Charles had thoughts of revealing the fact of the treaty to him, and of promising to support him in assuming the crown of Holland if the Republic fell. But he realized on more complete acquaintance that Orange would not have anything to do with it. The tangle was now pretty well knotted up. Protestant England was suspicious of her King. He was evidently scheming to make England Roman Catholic, and his obvious sympathy with France, detested alike for her Popery and her power, further alienated the goodwill of the majority of all but his consistently loyal Roman Catholic subjects.

Soon France began arming against Spain and Holland. Charles persuaded his Parliament into joining France against Holland, and in March 1672 the English fleet attacked Dutch merchantmen homeward bound from Smyrna up the Channel. England as a whole was torn between her determination to defend and to increase her trade and her long-standing detestation of France and Frenchmen and Popery.

The unravelling of the whole business resulted, as you know, in England's repudiation of James II and the reigning Stuart line. Hostilities between England and Holland lasted for two years. After they had ceased England offered to William of Orange as his bride the heir-presumptive to the throne—Mary, daughter of James, Duke of York. The Republic of Holland had made William hereditary Stadholder (king all but in name) in reward for saving the country from France when its Government had revealed its inability to do so. In 1689 he came to the English throne as joint-sovereign with his wife.

So much for English and Dutch rivalry. What else was happening in the world? The Turk was in Egypt, and his co-religionists lived and ruled on the north coast of Africa—partly by plundering Mediterranean shipping. Tangier, precariously held by the Portuguese, had also been given to England in Catharine's dowry. But the Moor proved too much trouble, and England in 1684 left him to his own devices. The mass of the interior of Africa, except for the hardly recorded efforts of a few missionaries and traders, lay unknown or forgotten.

At sea many islands remained to be discovered; not only groups of islands yet unseen (as far as we know), but islands belonging to groups sighted or touched upon by earlier navigators. (Parts of even such large islands as Sumatra and New Guinea, although so early known, remain unexplored to this day.) The problems of the Arctic and the Antarctic remained unsolved; the North-east and the North-west Passages were unconquered, but from the seventeenth century science made practical advances from which it never looked back, and navigation prospered thereby.

True, it was as late as 1633 that Galileo Galilei was called upon by the Court of the Inquisition in Rome to deny his belief that the sun was the centre of the universe and that the earth moved round it. But it was a last gesture of intolerance. The Pope was not an unenlightened person, and Galileo's persecution did not originate with him. Had Galileo's abundant

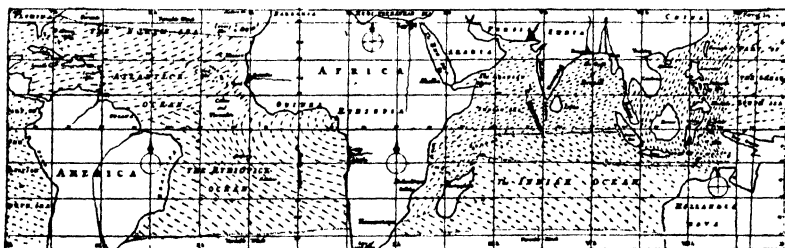
enthusiasm admitted a little tact he might have avoided this *contretemps*, and he certainly continued his researches. Nicolaus Copernicus, a Pole of the previous century, had startled everybody by his advanced views upon this theory. Galileo was but one of a number of brilliant men engaged in research in the seventeenth century. He is so well remembered because of his services to astronomy. He improved the first telescope, which had been invented in 1608 by Hans Lippershey, a spectacle-maker of Middelburg, and through it showed people the spots on the sun (which a Dutchman had already suspected), the mountains in the moon, and the rings of Saturn. He invented the thermometer, which other men soon perfected. The earliest microscope had been made in 1590 by Zacharias Jansen, of Middelburg; improvements had followed, and Galileo improved it still further. Already you have three of the most important scientific instruments of to-day coming into use in the seventeenth century, and ready for the steady improvement which they were to receive.

The science of navigation was bound up with astronomy, and navigation as a science was still very backward. One difficulty was the finding of captains and pilots sufficiently well educated to be able to use more scientific instruments when they were invented.¹ How could a ship find out where it was? From the time of Prince Henry the Navigator simple instruments had been improved upon and were in use for taking a ship's bearings, but no real accuracy could be obtained. The cross-staff (said to have been invented by a Jew in the fourteenth century), the astrolabe, and an elementary quadrant, pictures of which you may see decorating many of the old maps, would give pilots a rough latitude, but the measurement of longitude defeated them altogether. They had a compass; but the needle of a compass varies and does not continually point due north, and they did not understand how to make allowance for this. The result was that even if he had a fairly accurate chart, and was adept in the use of such instruments as he possessed, a captain was often far out of his reckoning, and might be wrecked as a direct result.

The problem of longitude was aggravated because the perfect timekeeper had yet to be invented. Sand-glasses and water clocks were all the ships had to depend upon. 'Nuremburg

¹ Compulsory training of masters and mates was not made law in England until the nineteenth century.

eggs,' great watches, had been invented in 1490 for personal use, but in the seventeenth century watches were still regulated by the sundial, and no accurate mechanical timekeeper existed. The first and imperfect chronometer was not invented until 1735, and hour-glasses were still used in the English Navy as late as 1839 for such simple services as timing the watch. (A boy stood by the hour-glass, turned it over when it ran out, and rang a bell. Hence the count of time by 'bells' on board ship at the present day.) All this would be too long a subject



A MAP BY BERNHARD VARENIUS

to go into properly here, and your geography text-books tell you something about it, but you must remember that in the seventeenth century scientists were busy laying the foundations of modern navigation. As early as 1598 Philip III of Spain offered a reward of a thousand crowns to anyone who should discover a satisfactory method of finding longitude at sea. The States-General of Holland followed Spain's example and offered ten thousand florins. England founded the Royal Observatory at Greenwich in 1675, for the express purpose of tackling the problem of longitude and aiding navigation generally. All navigators to-day time their chronometers by Greenwich. The English Royal Society for the advancement of science, preceded by other societies on the Continent, was formally incorporated in 1662 with King Charles II as a member. From about 1640 the nucleus of such a society had been at work. In 1685 in Italy Marco Coronelli, cosmographer to the Venetian Republic, founded the first geographical society.

Very beautiful maps were coming from Holland, who still kept the lead in cartography; and the method of studying geography as a science of the earth entered upon a new era in 1650, when a German, Bernhard Varenius, published his work. The foundation of societies for the advancement of science

naturally forwarded an interest in navigation for the sake of solving problems not connected with trade and national expansion, though often science went hand in hand with them when it came to the careful surveys which now began and continue to this day. The North-east and North-west Passages were recognized as unpractical propositions for merchantmen, and the exploration of northern waters went on partly because men wished to know what was there and partly because these waters promised rich rewards to the whaling and sealing industry. (A fresh burst of enthusiasm for the discovery of the North-west Passage was to come in 1745, when the English Government offered twenty thousand pounds for its discovery.)

The exploration of north-eastern waters and the North Pacific was to profit by the advent of a quite new recruit into the field of discovery. This recruit was Russia. Except for the brief mention that Queen Elizabeth sent letters to the Tsar of Muscovy by her merchant adventurers and that merchant companies were trading to Russia you have heard nothing of Russia since the Mongol swept over it. That was because there was little to tell you, and nothing that had any bearing upon discovery. With the seventeenth century, and especially after the time (1689) when Peter Romanoff (Peter the Great) became sole ruler, there is a great deal to tell you. Peter the Great brought Russia into touch with her more advanced contemporaries, and tried to modernize her by main force.

When Jenkinson and Chancellor visited Russia in the latter half of the sixteenth century Europe had lost touch with that country as a whole. The Tartar and the Turk had cut her off. She had taken no part whatever in the developments which were turning Western Europe into a modern world. Her clergy were illiterate; her customs Oriental in spirit; her manners barbarous. Neither the renaissance of learning nor the storms of the Reformation had reached her. Tentative efforts had been made by vigorous Tsars to relink Russia with her western neighbours, but it was not until the advent of Peter Romanoff that she became a factor in politics and a participant in the general progress of Europe. With amazing but effectual ruthlessness he swept away her ancient customs, and forced her to take what he regarded as her place among the Powers.

Peter's was a formidable character. He was subject to epileptic fits, but was otherwise robust and extraordinarily energetic

and intelligent. As a boy he early tired of his mother's restraint, and went out into the streets of Moscow to seek his own diversions. A Dutchman and a German helped him when he developed a passionate interest in forts and ships. The Dutchman taught him geometry and the principles of fortification, and the German, a shipwright, helped the future founder of the Russian Navy to build his boats. When he was eighteen he made friends with a clever but disreputable Swiss soldier who lived in the German settlement in Moscow. Peter was developing ambitious designs for further conquest and for the regeneration of Russia. He meant to rule, and he meant to have a country worth ruling over. His friend advised him to go abroad and study. For a few years he was engaged upon naval schemes. He had launched his boyhood's ships on the White Sea, and learned that it was frozen over for a great part of the year, so that arm of the sea was no use to a navy. He yearned for an outlet upon the Baltic, but that he could not get, for Sweden held the Baltic provinces. The outlet through the Black Sea remained, but Mongol and Turk barred the way. Muscovy still paid tribute to the Khan of the Crimean Mongols, and they in turn paid tribute to the Turk. The thing to do was to attack the Turk, and the first step in such an attack was to take the Turkish fortress of Azov. Peter failed in a preliminary attempt to take it by storm. He then decided to build a fleet. Thousands of workmen were pressed into the forests of the Don to fell timber and build ships, and from Holland Peter procured a model galley to copy. The result was the surrender of Azov and the foundation of the naval station of Taganrog, at the head of the Sea of Azov, in 1696.

Peter then bethought him of securing alliances in Western Europe against the Turk. He revived the scheme attempted, without much success, by former Tsars of sending young noblemen abroad, and he himself decided to take his Swiss friend's advice and go with them. In the spring of 1697 Tsar, ambassadors, and noble youths set forth on their travels. Peter visited, even worked in, French, English, and Dutch dockyards, seeking to perfect the navy he knew to be indispensable to Russia. It was material things he was interested in—mechanics, industry, commerce, clothes—that was what he wanted to understand. He needed culture only so far as he could apply it to his national problems.

On his return to Russia he began to put all his newly

acquired knowledge into use. He imported shipbuilders, artificers of all kinds, engineers, and architects. Badly enough Russia needed them. She still had no roads, no bridges, no properly built towns. One group of more enlightened nobles helped him, but he was opposed by others, by the Church, by his own son, all of whom resented his innovations. He crushed the nobles and the Church, and had his own son done to death. The story goes that when it came to a question of European attire, and some of his nobles clung valiantly to the great beards which were the traditional mainstay of masculine beauty, he took the shears to them with his own hand.

One of his last acts in the seventeenth century was to adopt the European calendar. The Russian calendar dated from the Garden of Eden. September 1 was Adam's birthday. How they worked it out I cannot tell you. In the year 1700 Peter made a truce with the Turk for thirty years, Turkey ceding Azov and the surrounding territory for ever. In the same year he began the onslaught which terminated in his wresting from Sweden the Baltic provinces he wanted, and gangs of Swedish prisoners began building St Petersburg. Russia had come to Europe.

Peter lived till 1725, and before he died he had accomplished in one span of life by the most ferocious methods what would have taken in Russia generations to accomplish by moderate means. He himself was half a barbarian. The saying "Scratch a Russian and you find a Tartar" might well have been applied to him. He was as savagely cruel as Ivan the Terrible, but he got his way. He founded a mint (so scarce had coin been in Russia that barter and various other means were used to supplement it); he organized trading companies; he founded medical schools and hospitals, schools of navigation, schools for children, and a fire-brigade. He appointed sanitary inspectors and a civic guard to deal with the beggars and the highway robbers who were the curse of the country round Moscow. He paved the city; he ordered the masses to church, so that his proclamations might be read to them from the pulpit; he simplified the clumsy Russian alphabet, sent to Holland to have type made, and set up a printing press. (The first work translated into Russian was *Æsop's Fables*.) He ordered landed proprietors to search for minerals on their estates or to allow the Government to do it for them. But he did not succeed in emancipating the serf. Numbers of the poor sold themselves

or their wives and children in order to live, and the most Peter could do was to issue a proclamation which forbade proprietors to separate the members of a family in their possession: either the family was to be sold as a unit or not at all.

Among his myriad occupations of later days we are told that Peter "paid especial attention to geography." In his youthful days, sailing his boats on the White Sea, he had had visions of himself sailing a north-east passage. At the end of the seventeenth century his surveyors, setting out from a settlement in Anadir, the province at the extremity of Siberia, made their way down to the banks of the Kamchatka river, a prelude to the annexation of Kamchatka. He sent expeditions to survey the northern coast-line, and to find out if Asia joined America or to prove Dejnev's story. Dejnev, or Deshneb, was a Cossack, one from among many drafts of Cossacks who were originally sent out by Ivan the Terrible to form military colonies in the process of his subjugation of the Mongols of Western Siberia. They eventually spread across the Urals, and were followed by fur-traders and adventurers of every description. In 1587, three years after the death of Ivan, they built a fort, and founded a settlement on the old Mongol site of Tobolskoi.

Fresh batches of soldier-adventurers and traders continually augmented the procession. They founded Tomsk in 1604. They reached Yakutsk, on the Lena, in the sixteen-thirties. By 1639 they had reached the Sea of Okhotsk, and built a fort of that name near the mouth of the river Ulya. In less than half a century they had swept across Siberia. By 1644 they had reached the Kolyma river, in the north, and from the mouth of that river Dejnev is said to have sailed round the end of Asia. This has never been proved, but East Cape is also known by his name as a reminder of the possibility. By the middle of the century the Cossacks had reached the banks of the river Amur, the natural boundary of Manchuria, and here the Manchus rebuffed them. Moscow sent an envoy to Peking in 1653 to try to arrange matters, but the Chinese murdered him, and a few years later the Russians were obliged to withdraw from their forts on the Amur. In 1676 a Greek, Nicolas Spafarik, managed to get across Manchuria to Peking, and this resulted in the sending of a Chinese embassy to Russia, headed by the Jesuit explorer named Gerbillon. This was the beginning

of Russian intercourse with the Jesuit missionary-explorers in China, which led to their linking up their discoveries and bringing the result to European maps.

Peter the Great was bent upon substantiating the reports of these discoveries, and his successors carried on. Western Europeans were soon hand in hand with Russian surveyors, working in Siberia at the danger of their lives and sometimes at the cost of them. Nevertheless they continued their work, and their survey of the northern coasts of Siberia revealed the course of a north-east passage. In 1732 the Government instituted a systematic survey of the north coast. In 1742 Chelyuskin reached the cape that bears his name, the most northerly point of Asia. In 1741 Vitus Bering, a Dane in Russian service, gave his life in making the discovery of the strait which bears his name, and settled the question of the relation of the extreme corner of the Old World to that of the New. Russians at this time explored the coast of Alaska, and Russians eventually were the first to build a settlement in order to trade there. Thus their charts made contact in the North Pacific with the charts of navigators working up from the south.

CHAPTER XXVI

CONCLUSION

WE have already overstepped the border of the seventeenth century. It remains for me to clear up one or two points which I feel sure you would like cleared up. First, when was the North-west Passage found, and when the North-east?

The North-west Passage was pieced together bit by bit as expedition after expedition responded to the encouragement of the British Government and the Royal Society, and to the devoted impulse which untiringly pursued the search for Sir John Franklin. John Franklin on a voyage from England in 1825-27 revealed a thousand miles of North American coast-line, and was knighted for this. In the spring of 1845 he set out on the voyage which, in the hour of victory, cost him and his party their lives. The searchers for Franklin, numbering among them English, American, and French explorers, and officers of the Hudson's Bay Company, revealed seven thousand miles of Arctic coast-line, and their names lie imperishably on islands, channels, sounds, and capes of the North Polar map. Sea and land forces combined, and as the ships felt their way through the difficult seas, and sent sledging parties ashore and across frozen passages, land forces on the mainland did for the north coast of America what Russians did for the north coast of Siberia. Captain Robert M'Clure, commanding a search party in 1850-52, discovered where the North-west Passage lay. His ship was frozen in, and he sledged over the last link between the known and the unknown. Subsequently the remains of Franklin's party were found on King William Island. The spot is marked by Point Victory, for the searchers had no doubt that Franklin knew, and was heading for, the right direction. Captain M'Clintock, who distinguished himself in the search by his organization of sledge operations, charted the last gap in the North American coast-line.

After the search was over exploration continued eagerly. Incidentally, Charles Hall, who in 1860-62 was following up the work of Dr Kane, an American sharer in the search, found on Warwick Island a stone hut built by Frobisher in 1578. A long time passed before the North-west Passage was actually

navigated from end to end. Captain Roald Amundsen, a Norwegian, whose name is familiar to you all, in a little motor sealing-sloop called the *Gjøa*, accomplished this in 1903-6. Sailing from Lancaster Sound, he paused for two years in Gjøa Harbour, King William Island, while he pursued scientific investigations in connexion with the Magnetic Pole; he set sail again westward in August 1905, got frozen in off King



ROBERT PEARY

Point, and had to winter there. In July 1906 the water was free again, and in August he entered the Pacific.

In April 1909 an American naval officer, Robert Peary, reached the North Pole. He made a hole in the ice about five miles from the Pole and tested 1500 fathoms down, finding no bottom. When he got back he telegraphed to President Taft, "I have

the pleasure to place the North Pole at your disposal." But as no one may claim areas of ocean, and the North Pole obviously lay upon ice-covered water, the United States was content with the honour of having found it first.

You may ask of what use are these Arctic waters and Arctic lands, apart from the geographical gain. The waters are rich in whale, walrus, and seal, and support an industry. As for the lands, Vilhjalmar Stefansson tells us, after years of living and hunting there, that they will become the home of a vast enterprise of reindeer ranching, and we shall in future all eat reindeer-meat as happily as we now eat beef. Airships will eliminate the fatiguing marches of old time, and hunters, so Stefansson says, though other Arctic-wise men are not so sanguine, will learn to 'live on the country,' and eliminate the horror of starvation.

The North-east Passage was navigated first by Professor Adolf Eric Nordenskjöld, financed by the King of Sweden, Baron Oscar Dickson, of Göteborg, and a wealthy Siberian. He set out from Göteborg in July 1878 in the *Vega*, a steam whaler, and after leaving Tromsø, in North Norway, followed the northern coast-line and emerged at the other end in July 1879.

Who found the Great Antarctic Continent? Cook in 1773 was the first to cross the Antarctic Circle, and his opinion, that if land existed farther south than his own course there was no practical advantage to be gained in seeking it, cooled English enthusiasm for Antarctic exploration. Cook, however, had not been the only navigator seeking the elusive Antarctic continent. Distinguished French navigators joined in the exploration of the Pacific and of the southern ocean both before and immediately after Cook's voyages. As early as January 1739, on a voyage in search of the great south land, Pierre Bouvet, a naval officer, discovered what he thought was the cape of some mainland. It is now known as Bouvet Island. Bouvet's information upon the subject of the icy waters of his course was at Cook's disposal, and Cook's instructions to examine Bouvet's discovery carried him into these latitudes, where he himself discovered South Georgia. Another Frenchman, Yves-Joseph de Kerguelen-Trémarec, seeking "Bouvet Land," in 1771 found what he thought was another bit of an Antarctic continent. It was the little island now known as Kerguelen. In the following year yet another Frenchman, Captain Marion-Dufresne, discovered the Crozet Isles, naming them after one of his officers. Thus, while giving Cook top marks as the most distinguished navigator of his generation, we must not allow him to overshadow the work of other men. In the Pacific one of his French contemporaries, Louis-Antoine de Bougainville, who also circumnavigated the globe, discovered Samoa. Following him, five years after Cook's lamentable death at the hands of natives of Hawaii in 1779, and armed with Cook's charts, came Jean-François Galaup, Comte de la Pérouse, to explore the Pacific, and to try to find a north-west passage from the Pacific end (which Cook had also sought, and reached as far as Icy Cape), and to see what he could add to Cook's examination of the Australian coast. In 1788, sailing into Botany Bay, he came upon the first settlers in Australia, under the governorship of Captain Phillip, R.N., who had just arrived there—in the nick of time, perhaps. La Pérouse did useful work, notably in Japanese waters. He lost his life, wrecked (and possibly murdered) with all hands on the little island of Vanikoro, in the Santa Cruz group, where he was examining the discoveries of the early Spanish navigators. I should like to repeat to you a remark he made, for it voices the presence of a new spirit of generosity which has entered the field of exploration. He

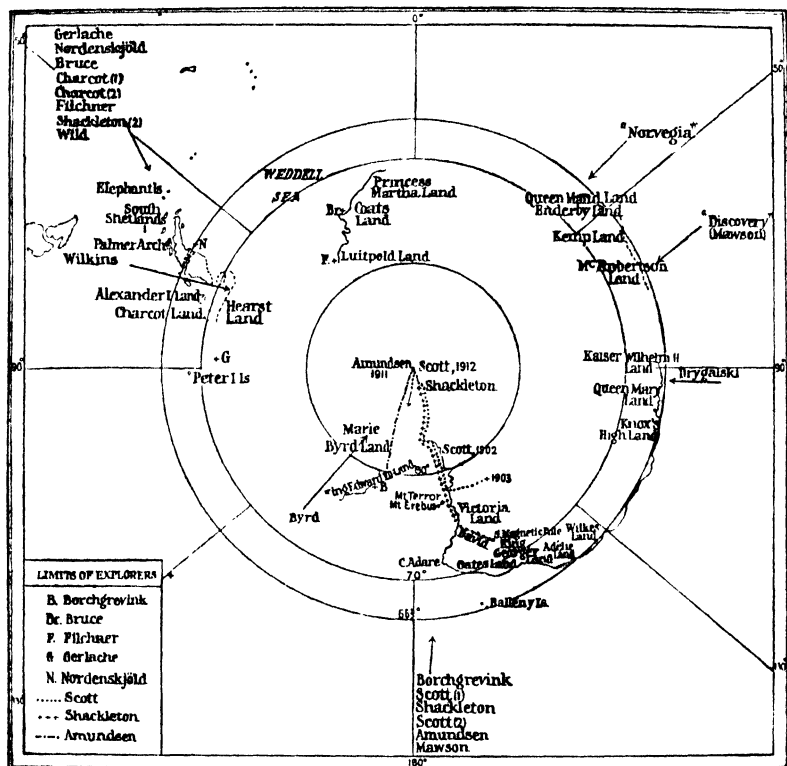
said, "Mr Cook has done so much that he has left me nothing to do but to admire his work"—a modest and gracious remark which Cook himself would have been the first to contradict.

No outstanding expedition, however, went as far south as Cook for years afterwards. Then, in 1819, set out a Russian expedition, the only Russian expedition which contributed to Antarctic exploration at all. The object of the voyage was to follow up Cook and to circumnavigate the Antarctic Circle. The commander bore a German name—Fabian von Bellingshausen. He sailed the sea now known by his name, and within the Circle found the islands also named after him, and Peter I Isle (named after Peter the Great). He called another anchorage, also within the Circle and well south of Cape Horn, Alexander I Land, after the reigning Tsar, under whose patronage the expedition had sailed. From there he headed for the South Shetlands, which he had heard of while resting in Sydney harbour. They had just been discovered¹—by this time news spread very rapidly. On his way Bellingshausen fell in with a fishing fleet of whalers and sealers. How far these men had penetrated nobody knows, and they, reflecting the old selfish spirit, were reluctant to tell. Somebody else might come and want to share their whales and seals. It was the old story of the trader still forging ahead into unknown, untold regions, and keeping it dark. They were not to be allowed to do so for long, however. At intervals for the next twenty years English expeditions went out, and a London firm of whalers, Messrs Enderby, gave instructions to the masters of their ships to chart most carefully the regions in which they operated. These men did excellent work, and Enderby Land commemorates part of it. Exploration flagged after this until the middle of the nineteenth century, and the major portion of Antarctic exploration belongs to our own time. In our days it has gone on uninterruptedly.

Nearly a hundred years after Bellingshausen's voyage men reached the South Pole. Two parties were there almost simultaneously. Everybody knows the story. Roald Amundsen flew the Norwegian flag at the Pole in December 1911. A month later Captain Scott arrived. He and all his party perished on the return journey. Between October 1930 and February 1931 the *Norwegia* circumnavigated the Great Antarctic Continent. The expedition was financed by the owner of a Norwegian

¹ By an English merchant captain, William Smith, who named them.

whaling fleet in the Antarctic. The object of the expedition was not only to circumnavigate "Sydpollandet," but to make oceanographical and meteorographical researches, and observations upon the life-habits of the whale.¹



published map—for so soon the last unknown coast-line will be charted. The great adventure of the mariners, begun before history in a dug-out canoe, and carried on within the grasp of history for some four thousand years, must come to an end, and at last in an icy sea the hand of some efficient and imperturbable officer will fill in on his ship's chart the last remaining blank space, and then go home to report.

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